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An In-State Training Manual for Extension Agents Working With Indian People in the Dakotas

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PROGRAM PLANNING

An In-State Training Manual for Extension Agents Working With Indian People in the Dakotas

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SOUTH DAKOTA STATE COLLEGE, BROOKINGS
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Contents

Foreword

This is part II of a study undertaken to improve the effectiveness of Extension educational programs with the Indian people of South Dakota. Part I summarizes the research accumulated over the years on the Dakota Indian—Dr. Vernon Malan analyzes these research findings in terms of a social system ("The Dakota Indian Social System," South Dakota Extension Circular 606).

The second part of the study, reported in this publication, deals with the principles of program planning and their adaptation to Extension educational work with the Indian people of the Dakotas. It is concerned with the process of change and to an extent with the influence of situational factors described in part I. Regardless of this, the two studies can be treated as independent inquiries.

Dr. John Photiadis has logically divided this part of the study into four chapters. The first describes the nature and principles of program planning in Extension; the second deals with relationships between the situation and selected program objectives; the third is concerned with teaching methods; and in the last chapter, program evaluation is the use of social and psychological objectives in Extension program planning.

It is planned that these two studies will be used in training Extension workers and others working with Indian people. Part II, in particular, has far-reaching implications in the conduct of Extension educational programs in this country and other areas of the world with people of different cultural heritages.

John T. Stone, Director
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PROGRAM PLANNING

An In-State Training Manual for Extension Agents Working With Indian People in the Dakotas

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Program Planning in Extension

THE EXTENSION PHILOSOPHY

Extension work is an out-of-school system of education in which adults and young people learn by doing. It is a partnership between the government, the land-grant colleges, and the people, which provides service and education designed to meet the needs of the people. Its fundamental objective is the development of the people.[1]

Since the fundamental objective of Extension is the development of people, its philosophy stresses the basic importance of the individual in the progress of the nation. The development of people means changing their behavior through learning.

The Extension Service, as well as other similar agencies, is an educational enterprise engaged in promoting learning. Its goal is to influence the human mind and thereby modify behavior; human action is affected. Through this process, the social and economic implications of Extension work become evident to us.

Human societies and the human minds which are their products are very complex. Each culture, each group, and each individual is different from the others. However, in all these diversities there are similarities and patterns. Theoretical sciences such as sociology, psychology, and anthropology use these patterns to develop principles.

Applied disciplines, such as Extension, use these principles to develop procedures and programs. Because Extension is an applied discipline, the work of the Extension agent is often mistaken as simple and easy to carry out. This may be true when the agent carries out his program without regard to results. Actually, Extension, although attractive to those who enjoy working with people is a complicated enterprise.

A scientist in applied natural sciences, for instance, usually deals with a limited number of elements which are well defined and relatively easy to control. An Extension worker, on the other hand, in addition to his technical knowledge, is expected to deal with the multiplicity of factors which affect human behavior. These factors are not well defined and are difficult to predict and control.

It is quite obvious that to deal with such complexity and unpredictability, the Extension program should combine two important and, in some ways, contradictory qualities. First, it should be well defined in order to cope with complexity, and second, it should be flexible in order to cope with unpredicted situations.

To make planning such a compromising program possible, the Extension philosophy should be, and is of such a nature that Extension workers can plan efficient programs regardless of this complexity and unpredictability. Therefore, before discussing Extension program planning, we shall mention a few of the highlights of the Extension

[1] Kelsey, Lincoln D. and Cannon C. Hearne, Cooperative Extension Work, 2nd. ed.; Comstock Publishing Association, 1955, p. 1.

philosophy which offer the background for planning such programs, as presented by the Extension theorists.[2]

Democratic approach. Local people should participate widely in determining programs, in carrying out phases of these programs, and in serving as local educational leaders, cooperators, and demonstrators.

Flexibility. A continuing expansion of the field of educational services rendered through Extension should be in action as new problems and new situations are recognized and scientific knowledge makes broadened services possible.

Alertness. A wide variety of the best teaching methods and techniques is necessitated by the informal setting of the Extension program and the diversity of the problems, needs, interests, and cultural backgrounds of the people being served.

THE HISTORY OF EXTENSION PROGRAM PLANNING

Following the examples of its counterparts, the Extension Service in this country initially used what we call the "laissez-faire" method of approach. There was no program per se, and the main duty of the Extension agent was to set up demonstration farms and give information when asked. Through this method of teaching, many improved farm practices were adopted.

The "laissez-faire" period was followed by a fact-finding period, when a large number of surveys were conducted to determine the effectiveness of the methods of approach.[3] Such surveys, among other things, indicated the significance of socio-cultural factors in the development of agricultural technology and the development of rural societies in general. These factors had not been considered previously. The surveys led to various modifications and additions to previous programs.

Today we use what we call the "democratic approach." The Extension Service takes the initiative in asking its clients about their needs, and Extension personnel and farmers together plan programs which have a well-defined plan of action. Extension has progressed from miscellaneous offerings, to a project series, to a coordinated integrated program unit designed to meet the expressed needs—social, economic, and educational—of farm families. As Peek states, such coordinated integrated programs "are the result of planning, weighing, measuring, discarding, selecting, combining and integrating, both the content and methodology of delivering a balanced, adequate educational effort to assist people to advance their level of living."[4]

THE NATURE OF PROGRAM PLANNING

Program planning is the process of determining the kinds of ends or objectives desired through teaching efforts. It is a guide, a blueprint or a map, used in moving toward goals that have been predetermined. These goals are determined by the needs of the people, by their value to the people, and by the amount of effort people are willing to expend to reach them. There would be little value in developing a program which was not based on needs, because if there were no needs, there would be no motivation; and if there were no motivation, there would be no learning.

For scholars of the learning process there is no such thing as unmotivated learning.[5] In other words, motivation is the sine qua non of learning.

Learning, on the other hand, we said is necessary to change behavior. In order for a farmer to adopt a new practice he must learn it first, but in order to learn it he must be interested in it.

Interest is based either on meaning or need. In suggesting a program for the Indians, we should not consider what we see as the goals of the Indian people; we should plan a program according to what the Indian people themselves consider important, either because these are things they need or because these are things that have meaning to them.

Often the needs of the people are not in line with Extension objectives. The role of the agent in such cases is to change unfelt needs into felt needs. Needs, as any other aspect of behavior, overt or covert, become felt only through learning.

In order for the Dakota Indian to develop interest in gardening, he must develop appropriate mental and manual habits. The agent can show him that gardening will help

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[2]Schulp, Lester, "Fourteen Basic Features of Cooperative Extension Work," The Spirit and Philosophy of Extension Work, edited by R. K. Bliss and associates; Washington: Graduate School, U. S. Dept. of Agriculture and Epsilon Sigma Phi, National Honorary Extension Fraternity, 1952. pp. 343-346.

[3]The findings of the first survey of this type have been published by the University of North Carolina press in 1911 in the form of a book under the title, Report of the Commission on Country Life.

[4]Peek, Frank W., Administrative Workshop; Baton Rouge, Louisiana, 1948. p. 138.

[5]Gates, A., A. Jersild, T. McConnell, and R. Challman, Educational Psychology, New York: The MacMillan Company, 1949, p. 301.

him secure additional food for his children. In this way the agent begins his education with a felt need because family obligations are needs in this society. The individual will be left to make his decision after the appropriate alternatives are presented to him. The final decision rests with the individual; the Extension agent presents available alternatives.

If the individual is convinced that gardening is a need, then the agent can continue his educational program. His program now is promising because, by changing the unfelt into a felt need, he can secure interest and participation. Felt needs operate as motives; and motivation affects both the seeking of contacts with the source of information which will satisfy the needs and the direct learning of such information.[6] Farmers who are more motivated have more contacts with agricultural agents, and they get more out of these contacts.

After such participation and contacts are secured, one can proceed, through education and the use of proper teaching methods, to change not only attitudes, but also values (which, as explained later, are important determinants of human behavior).

Both values and attitudes are predispositions to action—they help the individual make choices in his life from available alternatives. If these values and attitudes are in line with objectives desired by Extension, people will see a large number of their needs in line with these objectives. The main task of Extension is to educate people and to help them develop reference structures which will help them see their problems and the solutions to these problems in line with Extension objectives.

In planning a program for the Indians, the agent should realize that these people are born into a certain group, they are educated in this group, and their affiliations are in this group. The cultural values and attitudes of this group are the sources they use to make choices between offered alternatives in everyday life.

The Indian chooses the cure suggested by an old relative rather than the one suggested by the trained physician because, among other things, his frame of reference tells him that this is the right choice. This frame of reference has been developed through years of informal education, often accomplished under ideal educational conditions.

To make him forget what he has learned and to develop another frame of reference is a difficult task. The various parts of the cognitive structures and the values he has slowly developed through the years do not change overnight and do not change because the Extension agent says so. A very careful design, a very careful educational program, is needed in order to do it.

In the beginning such a program should start slowly, first changing areas which would least threaten the personality and the social system until desirable learning takes place. Relearning, which should take place in most instances, is difficult and should take place carefully so that the various parts will fit harmoniously together and integration will be accomplished slowly.

As Paul Leagans states, "learning and relearning require a plan."[7] All organized education rests upon the fact that all consciously controlled activities are most effective, and that progress is made more rapidly when a well thought-out plan of action is predetermined and then followed.

The Extension agent should try to project himself into the future and try to predict what the effect of his teaching will be and how it is going to affect the individual in his society. He should plan his programs with the understanding that it is dangerous to indoctrinate the Indian housewife on the teachings of the great women who fought for their emancipation without planning first a program which would change her husband's expectations in reference to his wife's status and role.

Likewise, the Extension agent should realize that it is futile to try to teach an Indian the use of insecticides when his value orientation tells him that whatever is not in harmony with nature is no good.

Finally, even if these errors concerning organization of objectives are not committed, no effective changes will occur if teaching methods are not adapted to the Indian culture. Knowledge should be built on already-known things, on already-held beliefs, and on already-operating methods of communications.

Differences in social behavior between Indians and whites reflect differences in their cognitive structures, and differences in cognitive structures reflect the differences in the kinds of physical and social worlds in which they live. The agent should understand that the Dakota Indian does not see what the agent sees and that he, the agent, does not see what the Dakota Indian sees. It is necessary for the agent to "step into the Indian's boots" first and then see what is good or bad, right or wrong, before he starts to think of planning programs with him.

With such understanding as stated in the following pages, Extension programs start with the analysis of the situation which exists in the community we plan to change.

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[6] Photiadis, John D., Contacts With Agricultural Agents, South Dakota State College, Brookings: B 493, Rural Sociology Department Agricultural Experiment Station 1961.

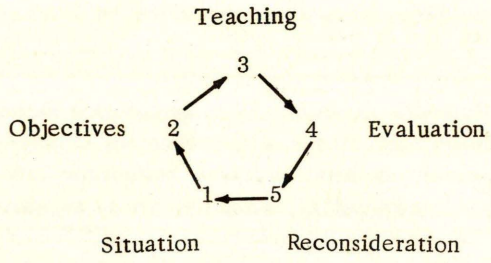
[7] Leagans, Paul, Professor of Extension Education, Cornell University, mimeographed material prepared for consideration by graduate students attending Extension Program Planning, 1959.

PLANNING SOUND EXTENSION PROGRAMS

Planning means to get ready to decide or act upon. It is a means, not an end. Planning requires knowledge and reasoning. To develop a program is to plan for activities—physical, social, and intellectual—that will lead the people to understand and work toward reaching their goals. Planning should include all aspects of living with which people are concerned.

Paul Leagans proposes five essential steps in planning effective Extension programs.[8] The following diagram shows these steps and their sequence.

These steps are used in the present inquiry as guides in the presentation of an Extension program adapted to the Dakota Indian culture. The analysis of the situation, which constitutes the first step of the program planning process, is presented as a separate publication.[9] The final two steps are treated as single steps in the last chapter of this paper.



Analysis of the situation. This first phase requires detailed information about all aspects of the situation. Information is needed about the people, their interests, education, what they think they need, their social customs, habits, and folkways. Facts are needed about the physical situation such as soils, type of farming, markets, size of farms, cropping systems, housing conditions, community services, and communication channels.

Some of this information will shape up into problems, local, national, and international, and will show the resources that are available through organizations and agencies. New facts and research findings should be introduced to the villager by Extension workers to stimulate understanding by the people of their problems. A thorough analysis will examine both changing conditions and take a careful look ahead, comparing what is with what should be.

Deciding on objectives or goals. To be psychologically sound, these decisions should involve participation of the people concerned, in selecting a limited number of goals and objectives. Objectives, at least in the plans of the Extension workers, should state the behavioral changes in people as well as the economic or social outcomes desired.

Teaching. This phase involves choosing a) what should be taught, and b) how it should be taught. The first two phases are inherently to create teaching opportunities, but the task is to create learning situations. The use of several different methods of communications must be used to stimulate learning. These will be chosen from mass media, group, and person to person methods. The ability to choose and use methods best adapted to particular objectives is the measure of an Extension worker's effectiveness.

Evaluation of the methods and outcomes of teaching. The fourth phase determines the extent to which the objectives have been reached. This will also be a test of how accurately and clearly the objectives have been chosen and stated. Plans for evaluation should be built into the plans of work during earlier phases. Distinction is made between mere records of accomplishments and comparing these results with the original objectives. The process of evaluation may be simple and informal or it may be formal and very complex. But it must be objective and accurate.

Reconsideration after evaluation. This step consists of a review of previous efforts and results which reveal a new situation. If this new situation shows the need for further work, then the whole process may begin again, with new or modified objectives. Hence, this process is continuous. The new situation may be different because: a) the people have changed; b) physical, economic, and social changes may have occurred; c) the people and Extension workers are better prepared to recognize new needs and interests.

This concept of the Extension education process is intended only to clarify the steps necessary in carrying out a planned educational effort. It does not imply that these steps are definitely separate from each other. Experience shows that planning, teaching, and evaluation take place continuously, in varying degrees, throughout all phases of a well-planned and skillfully executed Extension educational program.

According to the design then: first, we define the situation in which we are; second, we state objectives which the situation would suggest as proper; third, we select teaching methods appropriate to reach these objectives; and fourth, we evaluate this work by estimating the distance we have come in meeting these objectives. This evaluation will reveal the new situation at the end of the designated period. This situation will be used in turn to state new objectives, suggest new teaching methods, etc.

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[8] Leagans, Op. cit.

[9] Malan, Vernon, "The Dakota Indian Social System," South Dakota State College, Brookings: Cooperative Extension Service, E. C. 606.

Program planning, then, is a continuous process. As long as societies change there will be a need for agencies whose purpose it is to promote change, to plan educational programs, promote learning, and to assist in the adjustment of these peoples to their new social and physical environment.

Besides Leagans, other theorists have suggested different steps and designs for program planning. It is often difficult to determine which design is best. W. W. Reeder[10] of Cornell University, for instance, suggests the following six steps: 1) Select major purposes and objectives, 2)Evaluate the present position with respect to these purposes and objectives, 3) Select the specific goals for a particular project, 4) Evaluate the present position in relation to that project, 5) Choose methods to achieve the goals, 6) Evaluate the likeliness of their success.

Reeder begins not with the situation, but with the selection of purposes and objectives. He assumes that the agent has been working on his program and he is aware of the situation. This beginning would be unrealistic in the case where the agent is starting his program in a new county or community. He also mentions evaluation as a required necessity after each step. Paul Leagans also recognizes that evaluation is necessary after every move, but he emphasizes general evaluation at the end of a predetermined period.

There is no universal program which will suggest specific objectives and teaching methods applicable to all groups and situations. Each group needs a program adapted to its needs. Planning for subgroups in most cases is not feasible. Often, instead of planning individual programs for subgroups, we plan a program that will encompass the needs of a number of subgroups. Finally, program planning is a reality even though groups are always different from each other and a single program is not suitable to all situations, because there are principles which guide the planning of all Extension programs. Some of these principles follow.[11]

PRINCIPLES OF PROGRAM PLANNING

Any Extension program should be forward-looking and permanent. It should be prepared well in advance of its execution, but not too far ahead of time. Ordinary events may subject it to change in part though not in total. Soils are built up only through years of consistent and wise effort.

Values can be influenced also, particularly among young people. However, they will be influenced to a desirable extent only if a process of forgetting and relearning takes place. The agent who deals with a delicate area, such as values, should be able to change targets and methods of approach as soon as he sees that the group feels a threat to its security. The main target, however, should be kept constantly in mind.

In general, social systems are in a form of a dynamic equilibrium, they are in balance but this balance rests on a continuous change. Many changes in the system cannot be predicted, the agent and his program must be flexible enough to cope with such changes.

Planning the program should be a cooperative venture between the recipients of the program and the executor of the program. By planning together with the agent, people can suggest objectives and methods which are feasible and meaningful to them. By planning with people, the agent can secure what we call involvement. Involved people identify with the program, they feel that it is their program and they are willing to support it.

Spicer states that, "Real participation involves taking part in the planning and discussion of advantages to be gained, in the division of methods for introduction, and the execution of the innovation. Participation through their own social organization not only gives people a chance to develop a feeling of need for the change, but also enables them to work out their own."[12]

Program planning is a coordinating process. It is unwise for the agent of change to rely on his own efforts and vitality only. There is always so much to be done and one person cannot do it alone. An Extension program should coordinate the efforts of all interested leaders, groups, and agencies and consider the use of all possible resources.

The Extension Service is organized in such a way that its various agencies can easily become involved in the program. On the other hand, as has been stated in the previous pages, the objectives of Extension are so broad that they incorporate those of many agencies and organizations in the community or the county. If necessary, such objectives should be considered, supported, and even be incorporated into the program.

In order for the agent to be able to deal with such diverse objectives, he needs the support and advise of a specialist. Such a specialist should include not only those who deal with subject matter, but also those who deal with individuals and their social behavior.

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[10]Reeder, Williams, Professor of Rural Sociology, Cornell University, mimeographed material for students attending Community Organization, 1957.

[11]A number of these principles are discussed by Kelsey and Hearne, Op. cit., Kelsey and Hearne.

[12]Spicer, Edward H., Human Problems in Technological Change, New York: Russell Sage Foundation, 1952, pp. 292-293.

Program planning is based on facts. Facts about the main institutions of society, its social organization, and the values of its people should be used in establishing objectives and teaching methods. The outcome of previous plans should be reviewed and the results summarized and appraised, so that a realistic picture of the success of the various methods and the various objectives will be secured. The planning should be based on a realistic picture of the situation and not on hunches.

A sound program has balance with emphasis. Research dealing with contacts with agricultural agents and adoption of farm practices indicates that the Extension clientele should not be viewed as a single group but as a number of subgroups having different interests, motivations, and behavior patterns.

A program should include objectives which will help meet the needs of the larger group and its various subgroups. This program should also include teaching methods appropriate for such subgroups. Among program objectives there are those which are either more urgent than others or those in which attainment is necessary before other objectives are apparent. The program should place more emphasis on the attainment of these objectives, without disregarding those which remain.

The existing social organization should be utilized during the execution of the program. Societies have survived through the years by following certain patterns of behavior. In each society there are statuses and roles played by those holding these statuses.

There are accepted ways which facilitate interaction among people and channels of authority and communication which have been operating effectively through the years. By disregarding them the agent not only loses an already functioning system of authority and dissemination of information, but he also creates strong opposition.

Such opposition always appears when basic securities are threatened. By ignoring the individual's position in the social organization, we threaten basic securities. These behavior patterns are recognized and accepted as proper and ideal because they are supported by the norms of these societies, and they have become a habitual form of life.

Even when the agent feels that existing channels of communication and authority require change, he should use established means to introduce alternative forms. For instance, it would be unsatisfactory if the agent designated leadership to a person who people think does not meet the qualifications. On the one hand, people probably would not support the leader, and on the other extreme, individuals who, according to local standards are considered eligible for the leadership, would accumulate power in outright opposition of the program.

A program is a teaching opportunity and a continuous process. Extension programs do not offer material help; at least this is not their purpose. Their purpose is to change behavior, both covert and overt, through learning. It is a statement of teaching short- and long-term objectives and the arrangement of teaching situations and opportunities through which people receive learning experiences useful in understanding and solving their own problems. This teaching process, which is the program itself, is continuous. It does not end after the attainment of certain objectives. At the end of a program period, say a year, a new situation exists which incorporates still more new social and economic trends.

Societies are dynamic—they are changing continuously in their efforts to become better adjusted to their environment. These changes are forward and they increasingly involve more complex ideas and techniques. The program itself, then, should not only continue to exist, but it should also continue to improve in order to adjust itself to the rest of the system and, in turn, to help the adjustment of the whole system to its environment.

A program should start from where people are. A program should start with objectives which people consider important and feasible. Also, teaching methods to reach these objectives should be adapted to the educational level of the people. Due to differences in intelligence, formal education, and cultural conditioning, the same information would be very difficult to understand for some, quite understandable for others, and boring for still others. Likewise, information which is meaningful to one cultural group has no meaning to another.

A program should start on a level understandable to the majority, so that frustration will be eliminated and interest will be secured. Interest is a prerequisite to learning because it implies "readiness to pay attention." On the other hand, attention is the first stage of the psychological process which an individual goes through in adopting a new practice.

A program should start with the needs of the people (in conjunction with previous principle). Need is a condition requiring supply or relief. Individuals are motivated to do things which will satisfy their needs. Motives stir up behavior, they release energy, and they direct the individual behavior. If the agent sees one need and the Indian another, it is quite probable that the Indian will proceed towards meeting his own need as he conceives it, not as the agent conceives it to be. It is necessary then that the agent knows the felt and unfelt needs of these people so that he can change unfelt needs into felt needs.

Most often felt needs are based on the value orientation of the people. Knowing their values, needs can be predicted with a certain degree of accuracy. By adequately utilizing our knowledge of the values and situational needs of the group, we can increase accuracy in predicting direction and amount of energy available.

Besides these culturally determined needs, there are basic needs which are found universally in individuals and

which are exceptionally important to human relations and to program planning in particular. Four such basic needs are: Recognition, Security, Intimate Response, and New Experiences. These needs exist in every individual and as a consequence they constitute a reservoir of motivation which can be released if the agent or the program offer the proper opportunity.

Objectives

The second step in Extension program planning is to decide upon objectives. Objectives are suggested by an analysis of the situation. The Extension agent has to make decisions concerning: first, which objectives he should choose from a usually large number of alternatives; second, the sequence in which these objectives should be met; and third, the objectives upon which he should put the most emphasis.

The ability to make good judgments on such decisions determines to a great extent the agent's effectiveness. Good judgment is the difference between the agent who runs around in circles, occupying his time in matters which will have little final effect on the advancement of his clients, and the agent who has time to carry out a well-planned and well-balanced program which will contribute the most to the development of the people. The formulation, selection, and statement of objectives is decision making; it is a skill which can be improved through training and observation.

The analysis of the situation in a community or county tells us what the situation is; the statement of objectives tells us what the situation should be. The gap between "what is" and "what should be" will be fulfilled through our efforts and the use of proper teaching methods. Effort and teaching methods loose their importance if objectives are not properly selected. According to Caswell and Campbell,[13] "the character of an educational system is determined by its objectives. The most acceptable idea underlying educational objectives is the growth of the individual so that he will act as wisely as possible in the social groups. Acting wisely may be interpreted as acting in such a way that he will make the greatest possible contribution to society and at the same time receive the greatest possible satisfaction."

NATURE AND FUNCTIONS OF OBJECTIVES

Objectives are expressions of the ends toward which our efforts are directed. They imply "direction of movement" toward the attainment of a foreseen end. Sometimes an objective is far ahead of the people. In such cases we talk about goals in program planning. A goal may be defined as the distance in any given direction that the people are expected to move in a given period.

Any program has some objectives. The important question, however, is whether the objectives are significant, consciously recognized, clearly viewed, and specifically defined in terms of the behavior changes desired. In planning an Extension program for a Dakota Indian reservation, for instance, the agent could ask himself what should be the initial aim. Should it be change in agricultural technology or change in attitudes and values? What are the pros and cons in choosing one initial aim rather than another?

The agent reviewing the situation should consider the fact that it is futile to try to teach an Indian how to use insecticides when he does not believe in practices which disturb the laws of nature. His initial objective, then, should be toward changing certain values and attitudes. These values, however, are not held by all the people on the reservation or at least they do not occupy such a high rank in the hierarchy of their values. For certain people, hard work, faith in science, and similar values favoring

[13] Caswell, Hollis L. and Doaks Campbell, Curriculum Development, New York: American Book Company; 1935 p. 104.

technological change, occupy a more prominent position. These individuals should be approached separately and different objectives stated for them.

In most cases there are a number of objectives seen as alternatives by the agent. However, not all of these objectives are seen by the people as needs, or, at least not all of them are seen by the majority of the people as needs. For reasons which have been explained previously in the discussion on needs, it is important that the agent choose objectives which will be recognized as needs by a large number of people. According to Kelsey and Hearne this is what is really meant by the term "balanced program" in a county.[14]

A good objective in Extension is one that will provide possible direction for large numbers of people to move some distance. Extension must help people define the direction in which they want and need to go, then provide assistance to them in traveling in that direction. This is really the essence of Extension work.

Most Extension objectives can be grouped into three types: educational, economic, and social.

1. Educational objectives. The purpose of education is to change human behavior. Extension theorists suggest that in particular three forms of human behavior should be changed—a) knowledge, b) skills, and c) attitudes.[15] Often to attain an objective, it is necessary that all these three areas of behavior be changed. In order to introduce a farm or health practice, the agent should help people know about the practice. For instance, he should know what a balanced diet is, what nutrients each food contains. Second, the agent should help them change their attitudes toward balanced diets, and third, he should help them develop certain skills in the preparation of food.

2. Economic objectives. These objectives involve attainment after behavior has been changed. In stating each objective, we state the educational objectives which will contribute to their attainment. Increase in crop yield is the outcome of understanding of a certain crop system.

3. Social objectives. To develop leadership, farm organizations, improve living conditions, are social objectives. In most cases it is necessary that certain educational objectives be attained before such objectives can be reached.

Objectives perform a number of functions, some of which have been discussed. Leagans discusses the main functions of objectives and summarizes them as follows:[16]

(1) To describe the kind of changed behavior or new conditions or situation desired, and to be attained through the teaching process.

(2) To serve as a criterion for selecting or rejecting kinds of educational activity to be carried on.

(3) To serve as a criterion for selecting teaching methods, techniques, and subject matter.

THE IMPORTANCE OF CLEARLY DEFINING OBJECTIVES

Program planning and program execution are skills developed and improved through experience and effort. New agents and agents who have never had the opportunity to develop such skills see their work as hazy, uncertain, and hopeless. Many things enter their minds only to fade away when a new idea or a new individual case comes up for consideration.

In order for the agent to be able to operate effectively, he must have a well-defined picture of where he wants to go—in other words, he should have a clear definition of his objectives. A clear understanding of direction will help him adapt, incorporate, or reject new objectives without disturbing his program. It will also enable him to improve his program.

The more definite an objective, the more useful it becomes. The objective should be analyzed in terms of cultural behavior. Exactly what do we want to accomplish?

For example, we state the following objective: To change husbands' attitudes concerning their wives' participation in home economics activities. In considering this objective, we must know whether or not we want the husband to play a passive role and whether or not we want his wife to actively participate; also, who are the husbands we expect to influence? Approximately how many are there and what are their characteristics? Should we primarily choose key men, young men, or older men?

In other words, we should try to delineate as accurately as possible the boundaries of the objective. By defining clearly the objectives we not only know what we are supposed to do, but we also know more about when we should do it, the time we should spend in reaching it, and the teaching methods we should use. And finally, we make possible the evaluation of our effort, because if we do not know exactly what our objectives are, we will never be able to evaluate the success or the failure of our effort.

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[14]Kelsey, L. D., and C. C. Hearne, Cooperative Extension Work, 2nd. ed., New York: Comstock Publishing Associates; 1955, p. 112.

[15]Wilson, M. C. and Gladys Gallup, Extension Teaching Methods, Extension Service Circular 495, Federal Extension Service, U. S. Dept. of Agriculture, August 1955. pp. 4-5.

[16]Leagans, Op. cit.

CRITERIA FOR SELECTING OBJECTIVES

Often county agents feel that Extension objectives should deal with farm practices. As Kelsey and Hearne suggest, this was the case when the Extension Service started, because farm information was needed more than anything else.[17] Then, in the first years of Extension program planning, it was decided that all the needs of each community should be listed and consolidated into a program. The third phase, which is the approach used today, includes attributes of both previous phases.

This third approach is a combination of 1) the ideas of the specialists about what is needed and 2) the wants and decisions of the family. In other words this approach is an attempt to incorporate objectives dealing with both scientific knowledge and motivation. The latter is secured by stating objectives dealing with the needs of the people. Needs, however, could be many things besides farm practices.

Both needs and objectives should be selected according to certain criteria. John Finley presents the following questions which the agent should answer in order to determine needs:[18]

(1) How many have the need and in what way is the need significant?

(2) What is the relative importance of the need as compared to something else? This implies choice making.

(3) Does it have economic and social importance to the people for whom the program is intended ?

(4) Is the purported need significant in view of objectives of the Extension program?

(5) Who has the need; who are the people?

Leagans suggests the following criteria for selection of objectives:[19]

(1) They must be within the limitations imposed by law—purposes of the Extension Service, operating policy, and other external limiting influences. (Such as other agencies.)

(2) They must be significant to a relatively large number of potential participants in the teaching activity.

(3) They must be attainable a) through the educational process, b) within the time limitations of Extension worker and participant, c) within the physical resources of the participant, d) within the learning ability of the participant.

(4) They must specify the kind of behavioral change to be attained in learner and the subject-matter content to be dealt with.

LEVELS OF OBJECTIVES

Agents sometimes are puzzled with the position of the various objectives and the relationships among these objectives. They are puzzled with the scope of the various objectives they are considering. We said that the agent should have a clear vision of his objectives. Such vision means little if the agent does not have an understanding of the relationship among the various objectives. Some of them should be obtained before others, there are objectives which can be attained only after a considerable number of lower level objectives have been attained.

Before the Dakota Indian is taught how to start a garden, he should be taught about the nutritional value of vegetables as part of his diet. In order to clarify the position of each objective and the interrelationship among various objectives, Extension theorists usually classify them in three broad categories:[20]

A. Fundamental objectives. These are of an all-inclusive nature. Fundamental objectives are generally found in legislation and charters of organizations. In Extension an accepted fundamental objective is "to teach people to determine accurately their own problems, to help them to acquire knowledge and to inspire them to action, but it must be their own action out of their own knowledge and convictions."

B. General objectives. These are more definite statements associated directly with a particular organization (such as the Extension Service). They are concerned with the social, economic, and aesthetic approaches to people. An example of general objectives would be the improvement of the economic, social, and spiritual well-being of the farm family. Efforts to attain this objective include:

1. Improvement of farm income through the application of science and farm mechanization.
2. Encouragement of people to be wiser consumers.
3. Improvement of health through better nutrition and more adequate health facilities and services.
4. Improvement of family living through better housing, rural electrification, and more adequate labor saving equipment.

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[17]Kelsey and Hearne, Op. cit., p. 115.

[18]Finley, John, "Program Building in Extension Education," mimeographed bulletin, Dept. of Extension Education, Cornell University, Ithaca, New York. November 1959,

[19]Leagans, Op. cit.

[20]Cf. Merritt Thompson, "The Levels of Objectives in Education," Harvard Educational Review, XIII, 1943, pp. 196-211.

5. Improvement of educational and recreational facilities for the home and the community.

6. Development of a better understanding of and more effective participation in community, state, national, and international affairs to the end that constructive policies may be determined.

7. Improvement of the conservation of resources so that future generations also may have a good living and the general welfare thereby be safeguarded.

C. Specific objectives. These involve a definite subject matter. The approach is focused at the individual or group and utilizes the three types of areas of approach already mentioned. An example of a working objective appropriate for the situation on the reservation would be to secure children's participation in club work by developing favorable parental attitudes toward such participation, by selecting activities which would be of interest to the children, by either helping the development of friendship cliques inside the club or by recruiting close friends of members who are not in the club and by selecting, developing, and promoting leaders (particularly leaders who are more likely to stay long in the club).

D. Working objectives. These are the objectives which can be attained directly. They are the objectives with which we start. For instance, in discussing specific objectives we mentioned development of favorable parental attitudes towards children's participation in club work; the working objective in this case would be to arrange meetings with parents, to convince parents of the advantages of club work, to convince them—if necessary—that such participation will not reduce their respect towards the Indian culture, to keep parents and the community informed on the activities and accomplishments of the children.

It should be understood that in most cases there are levels of objectives between those mentioned; however, these four are more easily defined. The concept level of objectives is important because it gives the agent a vision of the process and the direction he has decided to follow. By attaining a number of working objectives, we reach specific objectives, and by attaining a number of specific objectives, we reach the general objective.

ANALYSIS OF THREE SOCIO-CULTURAL OBJECTIVES

It is obvious that a large number of long- and short-range objectives would be legitimate considerations for an Extension program for the Dakota Indians. It is not the purpose of this section to list all those objectives and as a consequence suggest a solution to the Dakota Indian problem. The purpose of this section is to analyze a few objectives with sociological significance and, using a few principles to explain why those objectives have been selected, what their relationship is to the other objectives and what their contribution is to the attainment of the ultimate objectives of the program.

Before we proceed with the statement of objectives, it is necessary to look at the situation and examine the potentialities of the reservation. As stated in the review of the situation, there is employment and land potential in the reservation for about half of the population there. However, there is also some kind of employment for these people outside the reservation. Three main reasons were mentioned as to why these people hesitate to go off the reservation, or if they have gone off, why they have returned:

(1) They have to live in a culture which is different from the one in which they were socialized.

(2) They are discriminated against when off the reservation.

(3) They do not have enough skill to compete for a job outside the reservation.

In stating objectives then, it should be determined whether these objectives should be directed at keeping people on the reservation or at helping them leave. Various reasons, one of which is economic, require that a number of these people find employment and settle outside the reservation.

Thus, there should be two separate sets of objectives for the two groups—those who are going off the reservation and those who are staying. Often such objectives are contradictory and careful consideration is needed to handle them. For instance the objectives in the first set would involve development of stronger ties with the community, so that community development projects will be possible. However, the objective in the second set would involve loosening of ties with the reservation community and development of such ties with a community outside of the reservation.

In the following pages, three objectives will be analyzed. The first two refer to migrants or potential migrants, and the third, to both groups. These objectives are: to prepare people for outside migration, to organize an outside community, and to promote values which are in line with the program objectives.

Prepare People for Outside Migration

As was previously mentioned, in order to obtain a higher level objective, a number of lower level objectives should first be realized. In the case of the Dakota Indian

migrants, two lower level objectives should be met: (a) To prepare people for the oncoming cultural adjustment and (b) To prepare people for the oncoming social adjustment.

Prepare people for cultural adjustment. First, let us examine why such preparation is necessary and why this is an important objective. Many of us know that a person entering a new culture has to go through a strong strain until he adapts himself to this new culture. This strain in the case of the Indian leaving the reservation often is so strong that he either returns to the reservation or he behaves in a way which could be considered as deviant, by both the white and the Indian group. In order to analyze all the causes of such strain, a voluminous treatise would be necessary. We will try instead to give the agent an understanding of the importance of the concept of culture.

Culture is a complex whole that consists of everything we think and do and have as members of society. In the broad spaces of the world and in the long stretches of historical time, it is culture that makes some people like and alike other people in all the significant senses in which they are similar and different.[21] The Indian society, as Vernon Malan said in the description of the situation, has its own belief and value systems which are typical of its people. People in the reservation behave towards each other in a certain manner which is in accordance with the status or the position each person occupies in his society. Men, for example, have their positions and they are expected to play certain corresponding roles. They also expect other people to treat them in a certain way. If a person does not play his role in the way it is expected, he will be forced by the group through some means such as criticism or gossip, to conform and to play his role in the accepted manner.

We call the force which brings people into conformity social control. The behavior standards which are required by the society are called norms. These norms and means of social control are the forces which make it possible for the Indian culture to retain its form and identity.

When a person is born in this culture, he observes all the roles which people play, he internalizes them, classifies them, and develops a certain personality structure. This structure includes roles or experiences gained primarily from society—in this case, the Indian society.

The values and attitudes that he is going to develop, the norms he is going to learn, etc., will most probably be in line with the values and beliefs of the Indian culture. When the time comes for the Indian child to act, he will most probably act in accordance with his values and beliefs and he will obey the norms he has learned in his society. In a similar manner, he will develop certain enjoyable habits which he will tend to repeat and which will enable him to make everyday decisions. In general he will see right or wrong, he will like and dislike things—according to his previous experiences.

Many things in the white society are not in line with his experiences and it is obvious that he will disapprove of them or he will feel uncomfortable when doing them. For instance, if he goes out of the reservation he will have to find a job. In order to retain the job he must obey orders—he must punch a time clock. These are things to which he is not accustomed, and of which he probably does not approve. He will feel uncomfortable practicing them. In order for him to get used to them, he must develop mental and manual habits which are in line with this new culture, as we say, he must become acculturated. This adaptation period, however, involves a lot of strain and frustration and is the most critical stage of the individual's adjustment to his new environment.

The foregoing discussion indicates the significance of this objective and the need for attaining it before other objectives are attained. The attainment of lower level objectives, such as: learning about living conditions of the non-Indian family, their working habits; learning about the things which people outside the reservation value and believe; learning about the norms they obey and expect others to obey and, finally, learning why outsiders behave the way they do.

As explained under teaching methods, different potential migrants need different kinds of information. Most of these people have visited the outside community numerous times and are familiar with many of its everyday activities. However, few of them can actually see how the outsider thinks, what motivates him, and why he behaves the way he does.

Prepare people for social adjustment. As it is discussed in the description of the situation, the image of the Dakota Indian is that of a proud warrior, who is above others in his family and equal among other braves in his community.

The Indian, when he goes off the reservation, knows that his image is not exactly similar to that of members of the white society; still, because of his long previous socialization in the Indian society, he cannot exactly bring his image down to where the white society will place him. Before he acts then, in a social situation, the Indian sees himself as he thinks others see him. However, he cannot perceive his exact image as others see him. The result of this contact is often different than the expected, and it often leads to frustration. Such frustration can accumulate and often leads to personality disorganization. For the new migrant, this situation becomes more critical because, in addition, he is also experiencing the frustrations which accompany one's efforts to adapt to a new culture.

Discrimination of this nature is more frustrating for those Indians who have adopted the Western values to a greater degree than their associates have. These people more readily use the white group as their "reference group."

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[21] Bierstedt, Robert, The Social Order, McGraw-Hill Book Company, Inc., 1957, p. 33.

Reference group is the group one relates himself to psychologically and to which one aspires to become a member.[22] Individuals with traditional values do not care as much whether they are discriminated or not, because their main reference group is the Indian group. By encouraging Western values, the agent should realize that he is also shifting these peoples' reference groups.

This stage of adaptation is familiar to many individuals who enter the American culture. For some people, because of cultural similarities and less visible physical differences, the adaptation is easier. However, all newcomers have to face certain consequences. One of the lower level objectives of the agent is to make the potential migrant aware of the fact that these are social processes and that other people in addition to the Indian have had to go through them. Finally, the agent should try to present as a reference group the group of Indians who have been successful in the white society. He must make them aware of their deeds, their accomplishments, and the position they occupy in the white society. He must help people understand that social pressure is not the end, but a situation which can be accomodated.

By stating such objectives, the agent is making an effort to cope with a condition which we call a state of anomia (described in the analysis of the situation). This is a state wherein norms become ineffective or disappear, and the individual, liberated from guilt and goals alike, flounders about unable to evaluate his own conduct.[23]

Either because social and cultural change is too fast to be integrated into the personality and into the social system of the Indian, or because the Indian is frustrated by not being recognized by the Indian migrant reference group in case he adopts the Western culture, the Indian does not care about norms of the Indian or white, and as a consequence loses his will for achievement. The result of such behavior is alcoholism, absenteeism, delinquency, etc.

By stating objectives which intend to prepare the Indian for better social adjustment in the outside society, the agent is helping the Indian stay outside of the reservation and avoid personality disorganization.

Organize a Community Outside of the Reservation

Groups such as the outside-the-reservation Indian group, which are not really attachments to a single set of norms, are easily influenced by a strong doctrine. Religious indoctrination is often easily accepted in such cases. There is no reason why this should not be true for indoctrination which would have as its purpose the acceptance of rules and values which are in line with the non-Indian society.

This acceptance rules out values; however, it would also encourage the use of the non-Indian society as a reference group. As explained previously, it would create stronger desires for acceptance and recognition by the non-Indian society.

Lack of acceptance and recognition, however, will bring about more severe frustrations and probably anomic behavior. This is why it is necessary that the Extension Service should try to create a strong Indian community outside of the reservation.

Such a community, if effectively organized, can become the center of interest of the outside-the-reservation Indians. Its purpose will be to keep its members close together so that they will have the feeling of belonging, have security and have recognition. These are basic drives and must be satisfied in order to have healthy adjustment.

Acculturation this way can be accomplished slowly through the gradual adoption of desirable norms. Initiation of such norms in an organized group is much easier than in the case where interaction patterns are not manipulated and controlled. When the acculturation process is completed with these safeguards, it can be determined whether assimilation or accomodation would be the most desirable condition of living.

Norms favoring certain cultural change will be adopted this way by an Indian group and in such change there will be only one set of norms. Both the Indian and the non-Indian group will be concerned with these aspects of life which are determined by the same set of norms. If interaction will increase in the group, conformity to its norms will also increase and this membership group then will most probably become the reference group for most, because membership groups with intense voluntary association are usually reference groups also.

Today, in most cases those who have adopted the values of the non-Indian society, have non-Indian groups as their reference groups. This, however, should not necessarily be the case with the new group, because the norms of this group will support the values of the outside group. This group, free from the tradition and the social pressure which exists in the reservation, can slowly start establishing its own norms.

If the situation then suggests a strong social system outside the reservation, the objective of the agent will be to initially introduce activities which will be "felt" needs for as many people as possible—in order to secure wide interaction. Such intense interaction as we said before, often helps the development of a cohensive social system.

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[22] Sherif, Muzafer, The Psychology of Social Norms, New York: Harper Brothers, 1936, pp. 89-112.

[23] Putney S. and R. Middleton, "Ethical Relativism and Anomia," American Journal of Sociology, Vol. LXVII, No. 4, 1962, p. 430.

Social systems are in the form of a dynamic equilibrium; they are not static, they are changing and retaining their balance. This balance refers to the fact that there are commonly accepted sets of norms, and social control is effective.

The objective of the agent who will help the organization of this community will be to help through education and through the use of group techniques, as mentioned previously, the development of norms which will be in line with Extension objectives. In the beginning such norms should not be much different from the existing ones. Also the activities which the agent will suggest in order to help the development of these new norms should not deviate much from the activities which exist in the Indian culture. As norms change slowly the group will also change, retaining its equilibrium.

By retaining obedience to the community group norms, high morals, which is so needed by the outside of the reservation Indian group, can be secured. Obedience to the norms on the other hand is secured when members of the group agree with its goals. This is why the selection of activities which will be acceptable by all members is one of the most important objectives of the agent who is helping in the organization of the community. As Loomis and Beegle state, "High morale exists when all members of the system are in accord with its ends, agree upon its basis of attaining status, have confidence in its leaders, conform to its norm , and are willing and ready to make great sacrifices to defend the system.[24]

Finally, it should be mentioned that all these complications and dangers would have been eliminated if there were sufficient employment inside the reservation. People would have the chance to practice what the educational program would suggest because they would have the means to do it. They would also be able to bear these changes with less emotional disturbance because they would have the security, recognition, and affection of their own group. As new cultural traits are adopted, new habits are developed and conditioning helps the learning of Western values.

Importance of attaining the two previous objectives. Attainment of the two previous objectives dealing with the preparation of the individual before he leaves the reservation and his involvement into the Indian community when he goes out of the reservation are exceptionally important—they affect the attainment of all other Extension objectives.

If the adjustment on the outside is not proper, the individual will either expose anomic behavior, which means that he will not care much about improving himself, or he will bounce back to the reservation. Returning to the reservation, he will take along with him new ideas which will probably affect the reservation living socially and technologically.

At the same time, he has returned to the reservation because he feels that this is the place for him, he feels that this is his group, this is the place where he can find recognition, affection, and security. In other words, he is convinced that he needs this group. Such needs usually strengthen the existing social system regardless of the fact that the norms of the reservation are traditional because it increases conformity to these norms.

Homans calls this the law of reciprocity.[25] The individual who has returned feels that he receives a great service from the group. The group in turn demands payment according to the services it is offering. This payment is the obedience to the group norms. The norms of this particular group have been established long ago and are traditional. The individual then is forced to accept traditional norms in spite of the fact that he left because he did not agree with them.

The socially and culturally hostile environment then becomes probably the most important factor in the maintenance of an underdeveloped society in the midst of the American society.

Promote Values which Are in Line with Program Objectives

Values constitute one of the most important and most vague concepts in sociology, psychology, and related disciplines. Any formal definition of values is likely to be too general to be of great use to an analysis at the present. We regard values as predispositions to action characterized by preferential interests, situations, events, or objectives as being "good," "bad," desirable, and the like. Robin Williams[26] recognizes four qualities in values. 1) They have a conceptual element—they are more than pure sensations, emotions, reflexes, or so-called needs. Values are abstractions drawn from the flux of the individual's immediate experience. 2) They are affectively charged: they represent actual or potential emotional mobilization. 3) Values are not concrete goals of action but rather the criteria by which goals are chosen. 4) Values are important.

To recognize the values and the value orientation of a society is extremely important for Extension, because by knowing the values and their functions, the agent has a deep insight into the why people of this society behave the

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[24]Loomis and Beegle, p. 9.

[25]Homans, George C., The Human Group, New York: Harcort, Brace and Co., 1950, pp. 284-288.

[26]Williams, Robin M., American Society, published by Alfred A. Knoph, Cornell University, 1954, p. 374.

way they do. Values are basic components of the individual's personality, and as personalities, to a large extent are the products of society. Changing values is as difficult as the changing of personality. If values, on the other hand, could be changed in a society or, to be more realistic, if their rank order could be changed, so that values which are in line with Extension objectives would occupy a higher rank, then Extension work would be a routine. People would approve of the recommended objectives and they would find ways to attain them, if they were shown how to do so.

In order to either lower the rank of a value or raise the rank of another value, a very painful and consistent process of learning and forgetting is necessary. Such learning can be achieved only with a well-planned program where objectives are clearly defined, properly selected, and imaginatively attained.

Agaton Pal discusses two schools of thought concerning changes of values or as he puts it, changes concerning what people consider "good life."[27] He uses this term because he considers that by living in accordance with his values, a person lives an enjoyable life. One of these two groups believes that means should be introduced first, gradually replacing the traditional means.

For instance, you convince people to adopt a specific farm practice, such as gardening. Repetition of the practice and the conditioning which will follow the activity will strengthen their value for hard work. At the same time this will also weaken their value for life in harmony with nature—a value which ranks high in the Indian society.

On the basis of this school of thought, desirable changes in values should be expected in those reservations where small industries have started. Working people, because of satisfactory wages, will be able to obtain a number of home facilities. Due to conditioning and the socialization process, use of these facilities will encourage the development of a value for material comfort and also for hard work. This approach is commonly used today by various agencies working with people in under-developed countries. Agaton Pal suggests that in spite of its wide application the results of this method have not been spectacular.

The other group criticizes the introduction of the means ahead of the ends because the rural people's acceptance of change is premised on a conditioning process, which may be more congenial with children, but not with adults. Among adults, change involves inconveniences; the adoption of a more efficient means disturbs a person's muscular coordination and disorganizes his social life. The change in this case requires unlearning of old ways, learning of new ways, and most changes generally require more labor input, which employs strength and discomfort. The rural people are usually content with their present level of living; contentment strengthens their traditional ways. Thus they do not consider change to be a worthy endeavor.

Believers of the "end first" believe that the people should first be given a vision of the "good life"; make them want to reach the level of the "good life" until they become committed to reach it. Then, help them to plan the ways of attaining the "good life." Their committment to reach the level of the "good life" and their participation in the planning of the ways of attainment will make them willing to undergo discomforts and deprivations. This willingness, however, is possible only if the people regard these sacrifices as a temporary necessity in the attainment of the "good life."

Regardless of which of these two methods of approach or a combination of these two methods the agent will decide to use, objectives should be selected and stated according to the criteria which have been discussed. He must decide which values he would like to challenge first, and which of the two approaches he will use. If he decides to use the "means-first" approach he must decide on what kinds of activities he should try to involve people in, which activities should be introduced first, who are the people he should try to influence first, what channels of communication can be used to reach them, what is the status of these people in the community structure, etc.

In an effort to attain objectives which are not concrete, as in the case of value change, it is important that the agent has a clear vision of these objectives and their levels. In a similar fashion, the agent should ask those questions if he decides to use the "ends first approach," or a combination of the two methods.

Whichever approach the agent uses, he must make sure that he is not threatening the values which these people possess. Kluckhohn refers to values as conceptions of the desirable, which influence selection from available modes, means, and ends of action.[28] He suggests that values are more than that which is wished for, desired, or preferred. They are limitations to these concepts which can be justified as "desirable" rather than merely "desired."

The Indian, for instance, values family life and he is ready to sacrifice himself for his family. In spite of this, however, he spends his meager income either drinking with friends or sharing it with others. Motivation and values, although closely related, do not always coincide.

In such cases it is up to the agent to play up one against the other. He can suggest that the new farm or health practices should be adopted for the sake of his family, to increase income, and provide better food for the chil -

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[27]Pal, Agaton P., "Ideal Patterns and Value Judgments in Development Program Planning," The Silliman Journal, Vol. VII, No. 2, Second Quarter 1960, Silliman University, Dumaguete City, Phillippines, pp. 144-145.

[28]Kluckhohn, Clude, Value and Value-Orientations in the Theory of Action, Parson and Shils, editors, Toward a General Theory of Action, Cambridge, Massachusetts: Harvard University, 1957.

dren. The agent can convince him to do this in spite of the fact that he believes that the new practice is not in line with his value for tradition or his value for living in a manner which is in harmony with nature. The agent can accomplish his objective as long as he uses a process which does not threaten these new values and as long as he uses other values to justify the action he is suggesting.

Besides contradictory values, other factors motivating behavior can be used to bring about changes in values. L. W. Dodd has conducted a detailed study of fifteen Navaho families which revealed that a multiplicity of factors accounted for the behavior of these individuals.[29] Affecting him would be social and cultural forces within his family, such as its size, structure, and level of acculturation; his contacts with the white world through school, occupation, and service during the war; and his personality, especially traits involving relations with contemporaries and his personal feelings of conflict and insecurity.

No one of the factors by itself either promoted or inhibited acculturation. The death of a parent or close relative facilitated acculturation for three men by disrupting families and producing "less effective socialization to Navaho values and patterns"; but in two instances traditional socialization was thereby strengthened because the children were reared by more conservative grandparents.[30] Likewise feelings of conflict and insecurity left four of the men to adopt as much of white culture as possible; but two others instead became alcoholics, and three solved their problems by "an intensified return to Navaho values."[31]

When a plunge is made into the details of an individual's biography, the pattern of many forces and events is blatantly evident. In his effort to justify his objectives, the agent should try to include justifications based on as many of these factors which influence the individual as possible, in order to secure behavior which is not in line with his values. This way, through learning and conditioning, he will be able to influence this individual's value orientation, if he knows his objectives, and his efforts to attain them are well organized.

Some people feel that outsiders do not have the right to change societies and primarily change their values. Others feel that such changes are justifiable, and more so for certain cases. It is not the purpose of this publication to discuss this philosophical question. We will only mention the change of the Indian society should be considered as a particular case. This is first because the Indian society is in the midst of the American society and interaction among their members is inevitable, and second because when people interact among themselves and in the meantime obey different norms, possibility for conflict increases and more so if the two groups are also physically different.

Teaching Methods

First we examined the situation which exists in the Dakota Indian society. In other words, where people are. Next we discussed where people should go from where they are by suggesting objectives which should be attained in order to get there. Here we will discuss ways and means to get there.

The fundamental function of Smith-Lever Act suggests that Extension is an educational enterprise whose purpose is the development of people. This is accomplished by fostering attitudes of minds and capabilities that will enable people to better meet the individual and civic problems with which they are confronted.[32]

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[29] Dodd, Leonard W., Becoming More Civilized—A Psychological Exploration, New Haven: Yale University Press, 1960, pp. 218-219.

[30] Dodd, Ibid, pp. 90-91.

[31] Dodd, Ibid, p. 107.

[32] Smith, C. A., and M. C. Wilson, The Agricultural Extension System of the United States, New York: 1930, p. 402.

Even in the case of a farm practice, the objective of the Extension agent is not to change the practice per se, but to change the minds. As Brunnen and Fung suggest, "Goals can be attained through development of people themselves to the end that they, through their own initiative, may effectively identify and solve the various problems directly affecting their welfare."[33]

Extension education is a system which works with the people rather than for them, and selects for treatment problems which are recognized by the people and which meet their needs and interests. It aspires to develop people as individuals, leaders, and cooperative members of the family, the community, and the world at large.

Extension is an enterprise whose objectives are educational. Extension deals with changes in human behavior, and these changes can be attained only through learning. Effective learning on the other hand is the result of effective teaching. Learning and teaching then are the two important processes which are involved in the attainment of educational objectives.

TEACHING AND LEARNING

Nature of Teaching

John Dewey defines teaching as "the process of awakening in another's mind and affecting the entrance of information which increases the ability of a person for future activity."[34] In Extension, teaching has a plan, and its purpose is to achieve effective learning.

P. L. Kruse, gives the following explicit definition of teaching: a) "Planned procedure to promote education." b) "Studying of situations so as to get behavior that will result in desired changes." c) "This implies: (1) understanding of human behavior, (2) skill with appropriate tools, and (3) clarity as to the product desired in terms of changed behavior."[35] Morsell, in his book, Successful Teaching, defines teaching as: the establishment of a situation in which it is hoped and believed that effective learning will take place.[36] In a similar fashion other Extension educators define teaching as planned procedure to promote desired changes in behavior, as the process of creating situations that are conducive to effective learning.[37]

These definitions indicate that the critical problem in teaching is the creation of a situation conducive to effective learning. The function of teaching then is to create learning situations.

Before we define what we mean by teaching situations, let us see what is involved in teaching. Teaching as such is a process and it involves several steps or elements which are outlined by J. P. Leagans as follows: 1. Objectives: all purposeful activity must have objectives, directions; 2. Learners: who want and need to learn subject matter that is in line with teaching objectives; 3. Methods or means of communication; 4. Instructor, leaders, or teacher: a person who has an idea with subject, methods, and useful technology to help people to attain the objectives.[38]

The process of teaching, therefore, may be described as: "an effective leader who, through good use of means to make the subject matter clear, communicates with the learners, to bring about the desired changes."[39]

Philosophy of Extension teaching. The role of the Extension worker is not to impose ideas on others but rather to create situations in which others develop the critical ability to make choices. The Extension agent does not tell people what they are supposed to do. The agent is not expected to tell the Indians on the reservation what their objectives are and how they should attain these objectives. He rather should present a number of objectives and let them make their own choices.

It is natural that without the agent's teaching, the Indians will choose objectives which are in line with their way of life, their habits, and the norms of the Indian society. The objectives of the agent, however, often differ. If so, he cannot tell them that these are the objectives they should try to attain. He can educate them instead so that they will understand the merits of his objectives. Although we do not tell the people which objectives they should attain, we educate them first and then we let them make decisions.

As Leagans suggests, "emphasis on the educational aspect of Extension work stems from the belief that education helps people learn how to do things for themselves; service consists of doing things for more people. Education

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[33]Bruener and Young, Rural Life and the Extension Service, 1949, p. 163.

[34]Dewey, John, Experience and Education, New York: The Macmillan Company, 1958.

[35]Report of Specialists Workshop for Arkansas, Oklahoma, Texas, Texas A & M College; College Station, Texas, April 26 - May 6, 1948. U. S. Dept. of Agriculture Extension Service, p. 31.

[36]Morsell, James L., Successful Teaching, New York: McGraw-Hill Book Company, 1st ed., 1946, p. 1.

[37]Workshop for Extension Specialists, Cornell University, Ithaca, New York, April, 1952; Dr. J. P. Leagans, Proffessor of Extension Education, Cornell University, Lectures in R. E., Spring Term, 1956.

[38]Leagans, Op. cit.

[39]Leagans, Op. cit.

makes people more self-reliant; service makes them more dependent on someone else. Education consists of more than imparting information to people. It consists of more than supplying answers to people's questions. Education must help people develop understanding and reasoning ability that enables them to think through problems and learn to arrive at solutions at their own."[40]

This philosophy of Extension teaching is often stated in terms of felt needs. We say that in Extension we change unfelt needs of the people into felt needs. Often in order to involve people in a program, we start with people's needs, sometimes inspite of the fact that these needs are not in line with our objectives. We do this because our purpose in this particular case is to help people participate in a setting which is controlled and which will allow us to either keep them tuned to our teaching or allow us to involve them in our programs.

If the Dakota Indians are interested in their traditional dances for instance, this means that this is a felt need for them. The agent should not have much difficulty securing participation in social gatherings where there will be an opportunity to observe traditional dances. This, however, will give him an opportunity to organize people and also create teaching situations where effective learning can be secured.

Teaching situations. According to Leagans "teaching situation is the skillful creation of situations and opportunities in which people gain abilities necessary for successful meeting of their needs and interests in line with their objectives."[41] In order to have an effective teaching situation, we must involve the needs of the people.

In spite of the fact, however, that people live in the same geographic area and interact in the same group, they are different from each other. They are different because they have different needs, and different previous experiences. Because they have different needs, they will be motivated by different objectives, and because they have different previous experiences, they will see as a different thing that which the agent presents to them.

For an agent to be an effective teacher, he must create teaching situations either for various groups of people separately or involve objectives and use approaches which will be applicable to a large number of people.

Stating an objective, recognized by a large number of people, is not enough to establish a desirable teaching situation because there are other factors which affect learning. The problems of Extension work would be relatively simple if the teaching and instruction did not have competition.

But other thoughts, suggestions, and ideas are pouring at people from all sides. Any one of these may supplement the idea planted by an Extension worker, no matter how well done.

H. W. Hochbaun, discussing the same problem, states that, "the mind is like a stream. In some people this stream may be sluggish and few ideas may enter or be carried far. But in most individuals the rush of mortal life makes this stream a torrent in which many ideas are moving around. This may be now on top, now under, now world aside, now thrust out. The Extension agent tries to put still more ideas in this stream. To get into the stream and to stay there may mean a task. The agent cannot paddle timidly along the shore. The idea is to be big enough and good enough so that it can be launched in this stream and hold its course."[42] Extension workers, therefore, must be equipped with a thorough knowledge of appeals to which people are most likely to respond in order to give the greatest number as much knowledge as possible in the most thorough, and effective, manner.[43]

In the case of the Indian, besides all those factors which make learning difficult, there is an additional factor which is probably most important. The Indian is not used to the Extension media which are used for white farmers. This is an important factor concerning teaching methods on the Indian reservation. In the case of white farmers it is necessary that the agent has a deep insight into the Extension educational process and great skill in the teaching art. In the case of Indian people, in addition to this, he must know well the social organization of this society and the existing channels of communication. Teaching methods must be wisely selected, properly combined, and skillfully executed in order to convey the subject matter to these people.

Eaton, in his book College Teaching, suggests that, "What the teacher desires, believes and thinks teaches no one. He can accomplish his ends only by putting before his learners what they can hear, what they can see, what they can feel, what they can understand, what they can move, what they can do; and in no other fashion. Hence, ultimately, the resources of a teacher must be found in what he can do to create the situations in which these actions can take place in relation to the content to be learned. He must speak or write words and signs, draw diagrams, pictures, place before learners pictures, charts, models, spacements, implements, machines, and other material things, move things, make gestures, insert, act to bring learners into contact with stimuli selected according to his purpose."[44]

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[40] Leagans, Op. cit.

[41] Leagans, Op. cit.

[42] Hochbaun, H. W., Extension Campaings, U.S. Dept. of Agriculture, Extension Service, Washington, D. C. Government Printing Office, Circular No. 9, p. 10.

[43] Leagans, Op. cit.

[44] Eaton, Theodore Hildreth, College Teaching, New York: A. K. Geltman Co., 1932.

An effective learning situation, according to Leagans, consists of five essential elements: 1) An effective instructor or leader, 2) Learners who want and need to learn, 3) Content or subject matter that is useful to the learners, 4) Appropriate instructional materials and equipment, 5) An appropriate physical environment. "The role of the Extension teacher is to so conduct himself and to manipulate the last four elements so that learners have an effective learning experience."[45]

The nature of learning. E. S. Conklin defines learning as: "The process of developing the ability to respond adequately to a situation which may or may not have been previously encountered. Learning is the process whereby behavior is improved and refined through adequate organization."[46]

Others define learning, "as the process by which one, through his own activity, becomes changed in behavior."[47] Leagans defines learning as "the process through which changes in behavior are achieved through effective teaching."[48] This last definition refers primarily to learning in Extension.

There are two common elements in these definitions; first, that the information has to be organized, and second, that learning is accomplished only by the learner himself. In other words, the agent on the reservation should have a vision of both how the individual on the reservation will react to his messages and how he should organize the material so that the individual will develop an efficient organization of his own.

Learning is something that takes place within the learner and is personal to him; it is an essential part of his development; it is always the whole person who is learning. It takes place when the individual feels a need, puts forth an effort to meet the need, and experiences satisfaction with the result of his effort. The thing learned then becomes a part of him. Learning is, therefore, not achieved by merely exposing the change target to a medium such as demonstration, the printed page, or a radio broadcast.

For scholars of the learning process, there is no such thing as unmotivated learning.[49] In other words, motivation is the sine qua non of learning. Felt needs then—a concept emphasized by Extension educators—are important because they imply motivation, areas where learning can take place effectively. Motivation affects the learning of agricultural technology in two ways, first by influencing seeking of contacts with agricultural agents, and second by facilitating the learning of the material to be learned.[50]

M. S. Knowles further suggests that "There can be no learning without the learner's active participation, explicit creation, and tangible change of active response."[51] This statement implicates another widely used Extension concept "learn by doing." In the case of young Indians, there are definite opportunities to practice this in carrying out projects and in participating in workshops. In the case of adults, and primarily in the case where change in values or attitudes is desired, the application becomes less obvious and less feasible.

As mentioned previously, Agaton Pal[52] suggests that changes in values of less developed people could be achieved by participation in activities which are in line with a particular value. For instance, time-keeping is not in line with the Indian culture, but participation in various dances or similar celebrations is a need. An accurate time schedule during such performances then could have a desirable conditioning effect. This example does not suggest that such activities are enough to change the attitude, it simply suggests that a member of such activities can bring about considerable changes.

O. Tead[53] presents a more comprehensive description of the learning process. He suggests that "at its best and most complete, learning combines thinking, feeling, acting, and expressing appropriately in relation to the demands of a confronted situation of need, desire, drive, or aspiration."

His statement suggests what we have said about learning by doing mental exercises. A new idea which is not in line with the Indian culture or the mental habits of the Indian people will tend to be pushed out of their minds, because it makes them feel uncomfortable. Numerous experiments have shown that discussion of some sort, conducted in a setting which is in line with the culture could not only bring about the desirable results because of group effects, but it could be retained longer for the same reason.[54]

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[45]Leagans, Op. cit.

[46]Conklin, E. S., and F. S. Freeman, Introduction to Psychology for Students of Education, New York: H. Holt and Co., 1939.

[47]Hammonds, Carsie, "Teaching Agriculture," Mc-Graw-Hill Book Company, Inc. New York: London, Toronto, 1950, p. 163.

[48]Leagans, Op. cit.

[49]Gates, A., A. Jersild, T. McConnell, and R. Challman, Educational Psychology, New York: The Macmillan Co., 1949, p. 301.

[50]Photiadis, John, "Contacts With Agricultural Agents", Agricultural Experiment Station, Brookings, South Dakota, Bulletin 493, 1961, p. 4.

[51]Knowles, M. S., Informal Adult Education, Assoc. Press, 1950, p. 31.

[52]Pal, Agaton, Op. cit.

[53]Tead, O., College Teaching and College Learning, New Haven: Yale University Press.

[54]Lewih, Kurt, "Group Decision and Social Change," in Readings in Social Psychology, edited by Newcomb and Hartley, pp. 330-344. Sherif Muzafer, "Group Influences Upon the Formation of Norms and Attitudes" in Readings in Social Psychology, published by Henry Holt and Co., New York, 1947, pp. 77-89.

When such experiences become part of the individual's cognitive structures, then conditioning can reinforce such learning if the agent has a program which will provide proper grounds for it.

Tead's definition also introduces the element, feeling, as a factor facilitating the learning process. Involvement of feeling helps both the learning and the retention of the material to be learned. The Extension agent could secure it by utilizing felt needs and operating in a cultural plane which would be meaningful to the Indian people. In explaining, for instance, a health practice, the agent could involve the responsibility of the household head towards his family, or demonstrate in a way meaningful to him how bad things could happen if this practice were not adopted.

W. H. Kilpatric, professor emeritus at Columbia Teachers College, in the same line summarizes his thoughts as follows: "I learn what I learn as I accept it. I learn it in the degree that I live it, in the degree that I count it important to me and in the degree that I understand it and can fit it in with what I already know and believe. And what I thus learn I build at once into character—that in fact is what to learn means."[55]

In this statement Kilpatric introduces another important principle of learning that the knowledge should be built on already-known things and on already-held beliefs. In the case of the Indian society, the new knowledge should be presented as an aspect of their culture and the used means should be no other than those accepted by the culture. This would be the case until new traits are adopted. New knowledge is built on old knowledge because only this way the new knowledge will form effective andnot confusing cognitive structures. Cognitive structures on the other hand are the basis which will give meaning to the phenomena we will observe.

Differences in social behavior between Indians and whites reflect differences in their cognitive structures, or to be more specific, to the amount and kind of knowledge people in the two groups have accumulated and reserved under a certain sequence. Differences in cognitive structures in turn, as in the case of values, are due to the differences in the kinds of physical and social worlds in which they live, in the kinds of problems they meet, and the kind of training they have been subjected to. The important thing, however, is that cognitive structures are not static—they are changing in response to the individual's learning experiences, his changing psychological state, and through the effect of the dynamic factors involved in retention.

The differences in cognitive structures among the people of the two societies as in the case of values to a large extent are reinforced because the two societies constitute separate social systems and the relationship between these two systems is of a particular kind. The Indian who will develop cognitive structures or values that will suggest the non-Indian society as a reference group will probably aspire to be accepted and if possible join the non-Indian society. However, because he is not accepted in most cases by this society, he looses his interest for achievement and as a consequence his motivation. It is suspected that from this point on the learning which the agent painfully is trying to create, will probably stop. Similar results should be expected in the case where not discrimination but cultural shock will place him in a situation far beyond his expectations. In such cases the obstacle is too much and most often it cannot serve as a motive, because it is too difficult to be attained.

As long as there is a blockage, cognitive reorganization tends to take place. The nature of the reorganization is much as to reduce the tension induced by the frustrating situation. A number of factors help determine the adoptive value of the resulting cognitive organization. Among those are the strength of the need, the individuals characteristic manner, and the perception of the block to the goal. However, in cases where needs are too strong or in cases where the blockage is too strong such as those described above perception can be disturbed or narrowed. This can lead to unreal and unadaptive organizations.

The above discussion, it is hoped, demonstrates the significance of the objectives stated in the previous chapter concerning preparation of the potential migrant before he leaves the reservation. Such preparation it is hoped will eliminate strong blockage and in turn increase the adoptive value of the individual. In order to learn the new culture or learn a trade when he is out, the individual must be motivated, he must receive certain rewards for this effort. It seems that higher income is not enough motivation. Acquisition of material wealth or material comfort is not as important a value for him as it is for the members of the non-Indian society with whom he is expected to compete. As mentioned in the previous chapter such motivation could be offered to a considerable extent by a well organized and directed Indian community outside of the reservation. This community is where he is expected to interact strongly and use it as a reference group. Because this community will constitute a part of the larger community, if properly directed, could slowly adopt norms which are in line with the larger community and with Extension teaching.

Learning experience. Learning experience is the mental and/or physical reaction one makes through seeing, learning or doing the things to be learned, through which one gains meanings and understandings of the material to be learned."[56] It is a concept referring to a single change in behavior initiated in a specific situation. A variety of learning experiences is required in order for the Indian to change his attitude towards his children's education. Thus,

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[55] O. Tead, Op. cit.

[56] Leagans, Op. cit.

in order to change this attitude he must react to a number of teaching situations set up by the agent.

These situations should be properly organized both in subject matter and in use of media, because learning is affected by a multiplicity of factors having to do with both the constitution of the individual and his social and physical environment. Paul Leagans[57] suggests three guides which have been mentioned now and then in the previous pages and which he considers necessary for developing desirable learning experiences:

1. Learning is an active process on the part of the learner. Extension people often say that we learn to do by doing, not by what the instructor or leader does. Learning takes place, then, through the experiences the learner has; that is, through the mental, or overt, reaction he makes to the seeing, hearing, or doing the thing to be learned.

2. Effective learning results from a plan, not from trial and error. Learning is an intentional activity on the part of the learner. Learning experiences should be goal-centered, not aimless. They should be planned for and should not be expected to result entirely from chance situations.

3. Effective learning experiences involve more than simply placing one's self in a position to learn. Activities like reading a bulletin, attending a conference, listening to a speaker, or observing Extension activity constitute situations that offer opportunity for learning. Exposing one's self to them, however, does not insure that a useful learning experience will result. They are usually not enough within themselves. It is what the participant does while in the situation that is the all-important factor in learning.

Learning experiences become more effective, lasting and enjoyable for learners if the psychological laws which affect them are observed. Highlights of such principles are presented in the excerpts of the journal, Techniques for Teaching Adults, as follows:[58]

> The law of effect—People tend to accept and repeat those responses which are pleasant and satisfying and to avoid those which are annoying. If an adult enrolls in a course expecting to learn a new skill, for example, and quickly finds that he is learning it and enjoying the learning process, he will tend to want to keep returning to class. Moreover, he probably will want to enroll in more courses upon completing the first one. In short, "Nothing succeeds like success." Students should experience personal satisfaction from each learning activity and should achieve some success in each class period by mastering some new idea or operation.
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> The law of primacy—First impressions are the most lasting. This means that those first classes are all important. The teacher should arouse interest, create a sense of need for the subject matter, and insure that the students learn it right the first time.
>
> The law of exercise—The more often an act is repeated, the more quickly a habit is established. Practice makes perfect—if the practice is the right kind. Practicing the wrong thing will become a habit, too—one that's hard to break. The teacher should be sure that his students are performing an operation correctly.
>
> The law of disuse—A skill not practiced or a knowledge not used will be largely lost or forgotten. The teacher should recognize the value of repetition in the classroom for reinforcing newly gained knowledge or skills. Studies have shown that the period immediately following the learning process is the most critical in terms of retention. Important items should be reviewed soon after the initial instruction.
>
> The law of intensity—A vivid, dramatic, or exciting learning experience is more likely to be remembered than a routine or boring experience. This does not mean the classroom should be a circus or a theatre-in-the-round. But, on the other hand, the teachers (and their subjects) longest remembered are those who had the ability to "bring their subjects alive." By using vivid examples and other supporting material, teaching can be dramatic and realistic.

The diffusion of farm practices. No matter how well prepared the presentation of a subject is, its effectiveness in creating desired learning experiences will be very limited if the subject matter is not in line with the previous knowledge of the learner. There are mixed blood Indian ranchers on the reservations who are very well informed about recommended farm practices, and there are others whose knowledge on this matter is very limited. It would be futile to offer the same material and use the same approach to disseminate information in these two groups.

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[57] Leagans, Op. cit.

[58] Excerpt from Techniques for Teaching Adults, Vol. 11, No. 2, November 1961.

In the case of a new practice or idea, we usually find people located on a sort of continuum, one end of which is ignorance of the existence of the idea or practice and the other end the adoption of the idea and satisfaction with its use.

To reach to the end of the continuum, a person must go through certain stages. Some people classify them as awareness, interest, evaluation, trial, adoption, satisfaction.[59]

During the first stage the individual becomes acquainted with the practice or idea. In the second stage he knows something about it and he wants to know more. In the third stage the individual makes an actual trial of the idea, he asks himself how this idea would fit his own situation. In the fourth stage he finds that it is possible that the idea will work and decides to try it out by himself. The fifth stage results from satisfactory trial and leads to continued use. Different amounts of time are required for different kinds of ideas and practices to go through these stages and different people go through them at different rates of speed.

Research and observation indicate that in accepting farm practices there is a slow gradual adoption rate at first and then a very rapid one. Such studies indicate that people with different socio-economic characteristics occupy different positions in the adoption process. In relation to the rate of adoption, five socio-economic categories of people are usually mentioned: innovators, early adoptors, early majority, majority, and nonadoptors. Besides socio-economic characteristics these studies indicate that different media affect differently the various stages of the diffusion process, use of different media then is suggested for the previous stages of the diffusion process.

Some basic rules about learning and teaching. Extension education as we have said is the process of teaching people how to live better by learning ways to improve their farms, home and community institutions. This is also true concerning Extension education on the reservation. What is different there is that the lower level Extension objectives are different from those outside the reservation. Since learning and teaching are always the keys to education, Extension agents on the reservation must understand at least the basic rules of learning and teaching and be able to apply them in their work. Some of these rules we discussed below.[60]

A. Learning is growth, live and continuous.
   1. Begin where the learner is.
   2. The new must be related to the old.
   3. Pace must be adjusted to the learner's capacity.

B. Learning is purposeful.
   1. The learning must make sense to the learner.
   2. Progress must be constantly appraised and redirected (Evaluation).
   3. Purpose must be kept in sharp focus.

C. Learning involves appropriate activities that engage a maximum number of senses.
   1. Learning results through self activity.
   2. Activities appropriate to the specific learning situation must be used.
   3. Learning activities should engage a maximum number of senses.

D. Learning must be challenging and satisfying.
   1. The agent's motivation of his client is essential in making learning more challenging.
   2. Appropriate and timely recognition should be given to individual's achievement.
   3. Standards demanded of learners should be suitable to their ability.

E. Learning must result in functional understanding.
   1. Memorization alone is temporary unless reviewed or put to use in a practical
   2. Subject matter should be organized into meaningful units.
   3. Activities that stimulate use situations are most effective.

F. Learning is affected by the emotions.
   1. The agent should strive to increase pleasant emotions and to decrease unpleasant emotions in connection with the learning process.
   2. The intensity of emotional feeling affects learning differently in different individuals.

G. Learning is affected by the physical and social environment.
   1. The general physical environment should be suitable to the kind of learning taking place and to the activities selected for the learning situations.
   2. Specific physical factors should be suitable to the kind of learning taking place and to the activities selected for the learning situation.
   3. The agent should recognize and utilize the effects of the social environment on learning.
   4. People with different cultural backgrounds need different teaching situa-

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[59] Beal, George M. and Joe M. Bohlen, The Diffusion Process, Ames, Iowa Agricultural Extension Service Special Report No. 18.

[60] A number of these principles have been received from the workshop for Extension Specialists. Cornell University, Ithaca, New York, April 1950.

tions in order to receive the same learning experience.

5. Group pressures can make teaching situation both every effective and ineffective. The agent must recognize them and try to control if he can.

COMMUNICATION MEDIA

Necessary and effective work in any culture involves a systematic knowledge of the social organization, attitudes, and beliefs of the people. Educational action knowledge of the existing channels of communication and the effectiveness of the various media in the particular culture are pertinent. If the agent on the Indian Reservation expects desirable changes in people's behavior, he must be able to send people messages arguing his case. Before the individual on the reservation receives his message there is no reason why the agent should expect a change, except if he relies on someone else's effort, or good luck.

It is necessary then that he should consider the set of physical channels of communication available on the reservation. But what channels will reach people most quickly and most effectively?

Hanks and Hanks suggest that the answer to this question can be found only in the conditions of a particular community or, in our case, on a particular reservation.[61] They state that in Beng Chan, a thais community, word concerning a certain health practice transmitted through official channels penetrated further and more convincingly than information disseminated by word of mouth.

Modern media of communication such as newspaper, radio, or telephone could be effective for certain Indian groups, although it is possible that more traditional methods may still be superior. Hanks and Hanks suggest that in each community the adequacy of a communication channel can be discovered only by systematic local investigation.

Before the agent transmits a message either for everybody or for some people on the reservation he must make sure that people will receive it. Most often, however, the best means to send a message, particularly to certain people on the reservation, is the word of mouth. In this type of communication in order for a message to be acted on, it has to carry the weight of respected and accepted authority. Different sources of a given message may have varying effect in producing action.

Besides making sure that the message will be received, the agent should first see that it will be understood and then that it will be received as cogent and resaonable. For each of these aspects of communication, the nature of the communication and its culture can be of critical importance. As an example, we do not have to compare the reservation with some other Indian culture, we could simply compare the group of fullbloods and mixed bloods. The same message will travel differently, will be understood differently, and will be perceived differently in these two groups. The community and its culture act as a series of filters through which any communicated message must pass if it is to be received and understood.

Messages most often transmitted through informal channels are distorted. In order for a message to be adequately understood, it must correspond to a significant extent to the basic assumptions, attitudes, and values of the community. Different people on the reservation will react differently to the same message when they first receive it. Most often this first impression will be either strengthened, modified, or reversed because of group influences. Numerous studies have indicated that the individual's attitudes and perception are strongly influenced by pressures exerted by the discussion group.

The informal communication process has been studied by rural sociologists in relation to adoption of farm practices and by anthropologists in relation to adoption of health practices. Results of such studies, however, have not been used for the development of generalizations with wider application. This has been done for studies dealing with formal communication processes and media. Paul Leagans[62] has presented some communication principles useful to Extension workers. Some of these principles have been incorporated into the set of principles presented below.

The communication process is not a unit act. Most often the communication process is conceived and treated as a single unit act. Actually communication in social and technological programs includes a number of steps and considerations. Usually the first step of the process is the identification of the needs of the receiver and the last step, the taking of action by the receiver.

In the communication process two things play the most important role—the organization of the material to be learned and the reaction of the receiver. Organization of material to be communicated is very important in order to build gradually and effectively the cognitive structures which will lead to desirable decision making. This organization of the material will be of little value if, during planning, the reactions of the receiver are not carefully considered for every step of the communication process.

Communication is a two-way process involving the participation of both the communicator and the receiver. The two-way process is necessary to assure that messages

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[61] Hanks and Hanks, Diptheria Immunization in a Thai Community, Russell Sage Foundation, 1955, pp. 181-182.

[62] Leagans, Paul, The Communication Process in Rural Development, Cornell Mimeo Release No. 6, Cornell University, Comparative Extension Publications, March 1961.

are received and interpreted as intended. Such process is also necessary in order to secure the reaction of individuals with different motivation, capacities, and behavior patterns. The reaction of the receiver and his comments should be used in order to direct the process in such a manner that rapport between communicator and receiver will be established.

In order for the communication process to be effective, opportunity should be given to the receiver to react mentally or physically to the message or messages. As mentioned previously, the important thing in this whole process is the reaction of the receiver. For it is what he does mentally or physically in the form of reaction to the content presented that he really learns. The communicator, then, can talk or act with great skill, but if the mind of the receiver is tuned in elsewhere, it really makes no difference what has been said or done. Not only should the receiver be kept in tune, but he should be given the opportunity to act either mentally, by making comparison, evaluating, etc., or physically, by actually doing things.

The communication process should be adopted to the culture of the recipient. In determining the content and method of disseminating information, the agent should take under consideration values, habits, and interests of the recipients. A message which is in direct disagreement with the value orientation of the people helps very little in the attainment of desirable objectives and creates fear and mistrust in the communicator and his program. Such messages, if they do not threaten basic securities, could be transmitted after they are justified with rational based on other aspects of the orientation of the people. In a similar fashion, media not in line with the culture could be discussed. In each culture there are channels of communication which have been operating effectively for long periods; they are habitual forms of behavior and they are accepted by the people. New communication methods and media should be introduced carefully and after considerable study.

Communication effort must be meaningfully organized. Organization may be informal, as conversation or discussion, or formal as a speech or lecture. Other common forms are: a story, a play, a debate, a report, a bulletin, a poster, or a panel discussion. Whatever the form chosen, the facts to be presented must be organized so as to enable the audience to gain a unified understanding of the message. Common ways to organize a presentation are: (1) chronological--historical, or as events took place; (2) logical—as ideas emerge from or give rise to others; and (3) psychological—timing or ordering of ideas according to the anticipated reaction of an audience.

The symbols used in the communication process should convey the intended images, ideas, or concepts. Since real situations and objects most often cannot be reproduced in their real forms, they are expressed with the use of symbols. We use symbols to describe how Y can be received from X after a certain treatment.

Particularly in the case where abstract ideas or concepts are used, the use of symbols becomes crucial. When the understanding of the concepts or a relationship is based on a sequence of misunderstood deductions, any part of this sequence will lead to misunderstanding of the intended concept of the relationship.

Difficulties of the same magnitudes appear in situations where no complexity, but different cultural or educational backgrounds between the communicator and the recipient exist. The communicator must know what symbols the recipient is familiar with and what they mean to him. Each symbol has a conditioning effect. It reproduces a certain image. The communicator must be aware of this image and not use symbols only according to the images they create to himself.

In order to adopt a new practice which either involves considerable changes in habits or threat to basic securities, the individual has to go through certain psychological stages. Different media and different sources of information play different roles in each of these stages. As mentioned before, the adoption of farm practices is a process which involves separate and distinct mental stages which can be classified.

Five such stages are commonly accepted. First is the attention stage. During this stage the individual becomes acquainted with the practice, he probably does not know anything more but its name, its existence, and has some general idea about its function.

Once the individual knows something about the practice it is possible that his interest will be stimulated. This constitutes the second stage of the diffusion process. When he reaches this stage he wants to know more about the practice, how to use it and what its potentialities are.

Learning enough about the practice, he would start thinking of how this practice would fit his own situation, this is the third stage of this process, the evaluation stage.

If he finds that the adoption of the practice is profitable and if other personal or social factors do not force him not to try it, he will go ahead and try the practice. This is the fourth stage, the trial stage.

The fifth stage of this process then deals with actual adoption of the practice and is the outcome of a satisfactory trial.

Different practices, according to their complexity, are adopted in different speed rates. Different media have also been found to have different effects in the various stages of the process. For instance, although mass media are the most influential sources in the attention and interest stage, neighbors and friends are most important in the following stages. This also holds true for specific media or sources. Some of them are effective in one stage and others in other stages. Individuals with different personal, social, and economic characteristics adopt farm practices at different

rates also. There are distinct characteristics among those who are considered the innovators, the early adoptors, the early majority, the majority, and finally the laggards.

Similar processes and factors probably operate on the reservation in relation to both the adoption of farm and health practices. Probably the factors which influence the diffusion process are relatively different due to the nature of the Indian social and personality system.

Adoption of practices and rate of adoption depend on the number of methods used. Both theoretical and empirical evidence indicates that as the number of methods of exposure to farm or health information increases, the number of families who change their behavior also increases. Concerning farm practices disseminated by the Extension Service, review of various research studies indicates that as the number of methods (meetings, demonstrations, personal visits, news stories, radio broadcasts, etc.) increases from one to nine, adoption of recommended practices increases from 35 to 98 per cent. Repetition of the message in a variety of teaching situations is exceedingly important in the diffusion of practices. It is obvious that the number of methods used should be determined by the effectiveness of each individual method and its cost.

Effectiveness of communication should be periodically checked. The communicator should know if those for whom the messages are intended received them and if they received them correctly. He should also know the reason for the ineffectiveness of the process and the public reaction concerning alternative approaches. Such evaluation, which in many instances should be periodical, is necessary in order to secure the maximum effectiveness of the process.

THE EXTENSION AND THE COMMUNITY DEVELOPMENT APPROACH

In international organizations such as ICA, Agricultural Extension and Community Development are two separate units functioning independently. There are cases however, as with the program in India, where the two approaches have been combined.

In this country under specific circumstances, the conventional Extension approach is combined with approaches similar to that of community development, as in the case of rural development.

On the Dakota Indian reservations, Extension agents have been using primarily the conventional Extension approach and only lately the community development approach. It would be useful to know which of these approaches is more appropriate for the Dakota Indian society. Before this is discussed however, one should know the difference between these two approaches and their advantages and disadvantages for a situation like the one on the Dakota reservation.

First let us see what the aims of these two programs are. The staff of state leaders and agricultural agents of New York in a special workshop defined Extension Service as "an Educational Agency, the primary purpose of which is to help people to become capable, effective citizens in a democracy." They have stated the following as general Extension objectives: (1) to help people become acquainted with and to understand research and other information in agriculture and related fields as it applies to their business and their lives, (2) to encourage the application of this knowledge and research findings, (3) to help people recognize situations and identify their problems, (4) to assist people to plan the best means of meeting these problems, (5) to encourage appropriate individual and group action to carry out the plans which they make.

Murray Ross, in his book Community Organization, states that "Community Development designates the utilization under a single program of approaches and techniques which rely on local communities as units of action and which attempt to combine outside assistance with organized local self-determination and effort and which correspondingly seek to stimulate local initiative and leadership as the primary instruments of change."[63]

Carl Taylor similarly states that "Community Development is the method by which people who live in local villages or communities are involved in helping to improve their own economic and social conditions and thereby become effective working groups in programs of national development."[64] He further affirms that the adoption of this method is based upon knowledge that villages which in the past have seemed lethargic and not interested in change, will become dynamic if they are permitted to make decisions themselves, exercise responsibility for them, and are helped to carry out projects and programs for improvement of their villages.[65]

Comparison of the two approaches. From the above discussion it can be seen in both approaches the aims or general objectives are the same, to help people help themselves in improving their personal, social, and economic conditions. Concerning lower level objectives, however,

[63] Ross, Murray, Community Organization, Theory and Principles, New York: Harper Brothers, 1955, p. 7.

[64] Taylor, Carl, Community Development, Progress and Methods, published mimeographed paper, 1956

[65] Taylor, Carl, Ibid.

the emphasis is different. Different also, is the method of approach.

Let us see now what some of the differences are in the two methods, what some of the advantages and disadvantages are, and how they can be applied in the situation which exists in the Dakota Indian society.

Community development programs. (1) They emphasize group approach. The entire Community Development theory is based on interaction and group powers as primary agents of change. They are usually applied to underdeveloped countries where people are more attached to their groups.

(2) They emphasize community approach. In less developed countries the community constitutes a well defined social system because of interaction inside the group limited interaction with outside groups and existence of a well defined set of community norms. Manipulation of the entire system is then expected to effect each person who is a member of this system.

(3) They emphasize group projects. They start with small pilot projects which are based on the needs of the group, which are easy to complete and which guarantee success.

(4) They emphasize mobilization of large masses of people and projects are selected primarily on the number of people they will involve.

(5) The aim is individual organization so that the community will come out of its lethargy and will proceed towards meeting desirable objectives on its own.

(6) Due to massive approach it can bring about change to larger numbers of people faster; due to the fact that it deals primarily with informal groups, personal means are the most available channels that can be utilized effectively. Due to the fact that it is not necessarily attached to the Department of Agriculture, it can gear its programs towards meeting with flexibility a variety of needs.

The Extension approach. (1) Extension programs place emphasis on establishing channels between all higher centers of information and farmers or formal organizations and use trained personnel to diffuse agricultural information to the recipient.

(2) Due to the fact that the individual is the main target, promising individuals can be singled out and assisted more effectively. These individuals are expected to become demonstrators for the rest of the people.

(3) Due to the fact that individuals and individually organized groups are the targets, a variety of needs can be met.

(4) Due to the fact it does not depend completely on the group it can operate regardless of group friction.

(5) Due to the fact that a large established organization is necessary for its function, its establishment and function in new and under-developed areas becomes difficult. First, because it requires large numbers of trained personnel and second because it requires advanced means of communication in order to reach the individual.

(6) Programs can be planned easier. People can be served more steadily.

In general, we could say that the Community Development approach emphasizes the informal group approach and it utilizes the group power to attain its objectives; while the Extension approach puts more emphasis on establishing formal agencies to transmit mainly farm information to the individual farmer through the use of formal channels and organizations. The former can bring about change faster while the latter through the use of an effective organization can secure and transmit specialized information steadily and safely.

In the case of the Dakota Indian Society, we have both the need for fast change and the existence of powerful informal groups. This implies that community development should be a desirable method of approach. Community development, on the other hand, encourages involvement in the community group and, as a consequence, community consolidation. Such involvement however, does not favor development of attitudes towards leaving the reservation for outside employment, which in many instances may be the only solution. This also would make more difficult the preparation, both technical and psychological, which as we have said is required before individuals leave the reservation.

In a case of this nature, the conventional Extension approach could be quite effective. The Extension approach could also be more effective in taking advantage of all the agencies and institutions which exist in this country, but not necessarily in other countries where community development programs have been used. The situation on the Dakota Indian reservation indicates that a combination of the two approaches could be advisable. Such an approach has been quite successful in India, regardless of the fact that it bears the name, Community Development.

Carl Taylor, evaluating the Community Development program in India, states that "India's program is unique in that it is both a Community Development and an Extension Program. It is a Community Development program in that its major objectives are to develop more than five hundred thousand village communities by methods which will stimulate, encourage, and aid villagers themselves to do much of the work necessary to accomplish this objective. It is an Extension program in that it develops channels between all higher centers of information and villages, and develops trained personnel to carry agriculture, health, education, and all other types of scientific and technical knowledge to more that two hundred and seventy five million villagers living in hundreds of thousands of villages." [66]

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[66] Taylor, Carl, Op. cit.

If such a unique program has worked in India, which is a Gemeinshaft society like the Dakota Indian society, there are not many visible objections to the fact that this method would also work on the Dakota Reservations. Of course the community development aspect of such a program and even the entire program as such would probably be more effective if the employment opportunity were not outside the community but inside so that people would not have to go outside the reservation. This way there would be no reason to be afraid of involving everybody in activities which could increase their ties with the community group. In addition, securing employment inside the Indian community will offer people the opportunity to participate in activities which are in line with the western culture and would give them the power to acquire western cultural items. In the meantime they can retain close ties and sentiments of attachment with their group, which are so necessary for mental health and the effective adaptation to a changing culture.

Evaluation

NATURE OF EVALUATION

The fourth step of the program planning process is evaluation of objectives and teaching methods.

A single lower-level objective is expected to help the agent determine the direction towards which he wants to move. A goal will make him aware of the distance he wants to move in that direction in his effort to reach this objective. At the end of the designated period, sometimes the objective or the goal is reached as expected, sometimes it is exceeded, and sometimes the effort falls short and no actual change in behavior occurs. It is necessary for the agent to know where he stands in relation to this objective in order to continue, discontinue, or modify his educational program. Otherwise he will have to play hunches, and use the trial and error approach of solving problems, which, from the point of view of effectiveness is the least desired method.

The agent faces similar but more complicated situations in relation to higher level objectives. Concerning such objectives, it is necessary to check the attainment of not one, but a number of objectives, which, when individually reached, will help in the attainment of this general objective. In addition, it is necessary to check the importance of each sub-objective in the attainment of the high level objective, the position of the objective in the sequence of change, and the amount of time and effort spent in an effort to reach each sub-objective.

Finally, when we come to evaluating entire programs as in the case of the program on the reservation, it is necessary to check the distance we moved in relation to each general objective and the contribution of each of these objectives in the attainment of our over-all objective.

Often because we are not aware of the importance of the above considerations, or because we over-rate our abilities and capacities, and because of the principle of ease and comfort, we dislike following such organized evaluation procedures. Instead we trust our over-all impressions; we play hunches; and in general we use the trial-and-error approach, this time, not in relation to selecting objectives and teaching methods, but in relation to evaluating them.

Evaluation in Extension is not an easy task; it requires alertness, persistance, and orderly thinking. Its contribution, however, especially for programs on the reservation, is as important as that of the navigator on a rough sea. It helps the agent reach his destination by the shortest and safest road. The complications and importance of evaluation become even more significant in the case of programs on the Indian reservations in the Dakotas, where, among other things, the organization of the personality and the social system are intervening variables strongly affecting the program. Today one wonders if programs in the past, instead of preserving these two systems from the threat of disorganization due to rapid change and increased interaction with non-Indians, have instead acted in such a manner to facilitate their disorganization. In cases of such cultural impact, it is more profitable to limit the intended changes to those aspects of the simple culture which when modified or changed would moderate the impact of the oncoming complex culture.

DEFINITION AND PURPOSE OF EVALUATION

After discussing the position of evaluation in the Extension program planning process, let us see what evaluation in Extension is.

The word "evaluation," literally defined, means "careful appraisal." In other words, appraisal which is the outcome of conscientious thinking with consideration of all possible factors involved in the appraisal situation.

In discussing the relationship of the various program planning steps, we said that in Extension program planning we evaluate according to predetermined objectives and methods. For this type of evaluation, a more explicit definition would probably be necessary. In the handbook for agricultural advisors, "evaluation" is defined as "the measuring of progress in attaining objectives and balancing the value of this progress against the effort involved in achieving it."[67]

In other words, in Extension we evaluate first, by measuring the distance we have moved forward towards reaching predetermined objectives, and second, by trying to determine whether the distance we have moved is worth the money and effort involved. A logical way to determine the value of such effort would be to compare this with other similar efforts and objectives. For instance, we can evaluate the effectiveness of two different methods by measuring the time and effort spent to reach the same distance in attaining the same or similar objectives.

We also evaluate an objective according to its importance in attaining other objectives. As explained previously, the importance of the objective will be determined not only by its contribution to the attainment of the higher level objective, but also by the position of the objective in the sequence of changes we anticipate. In other words, it is possible that a certain objective does not contribute much directly to the attainment of the higher level objective, but the position of the objective is such that other desired objectives cannot be reached at all or cannot be reached effectively if this objective is not attained.

SCOPE OF EVALUATION

The Extension Service, as well as other similar agencies, is an educational agency. The purpose of Extension is to change the behavior of individuals and groups. The Committee on Evaluation of Adult Education suggests that "the primary purpose of evaluation in education is to find out how much growth and change has taken place as a result of educational experience."[68] One evaluates a total program or major parts of it to find out how much progress has been made toward program objectives. Kelsey and Hearne describe the purposes of evaluation in a summary form as follows:[69]

1. To provide a periodic test which gives direction to continued improvement of work.
2. To help determine the degree to which the important purposes and specific objectives are being attained and, in the process, to help clarify these objectives.
3. To furnish data regarding the rural situation essential to program planning.
4. To serve as a check on Extension teaching methods.
5. To provide evidence of the value of the program.
6. To give satisfaction to cooperators and leaders through an understanding and appreciation of what is accomplished.

As mentioned in the section on objectives, evaluation is the part of program planning most often ignored—at least this has been the situation on the Dakota reservations. Agencies and programs have been coming and going through the years, defining the situation in relation to what was evident at that particular time and not in relation to the objectives of the previous approach; the assumption was that previous approaches were not worthy because they were not able to convert the Dakota Indian into a "rational," business-like, respected American citizen.

Such a definition of the situation suggested objectives and methods which were usually different from those of the previous program. At the end of a designated period certain changes had occurred. Some involved improvement in the level of living, in nutritional habits, in occupational habits, and in values and attitudes. Because of these changes some individuals felt that the norms of the Indian society did not fit them, and they adopted those of the non-Indian society; and others found themselves in a position where they had to ignore the norms of both societies.
tory and no one took the time to analyze them. Agents of change felt discouraged and disappointed, and they either retreated to pursue morale-wise a more rewarding project elsewhere—or they retreated into themselves, losing interest and vitality because of low morale.

Low morale and dissatisfaction concerning accomplishments have been recounted by most of the agents who work on the reservation today. They do not feel that they have contributed enough. However, most of these agents evaluate their accomplishment not in relation to an organized set of objectives—a set which involves level and sequence of objectives—but in terms of objectives they consider important, such as use of modern appliances and adoption of farm and home practices. However, many have reported

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[67] Agricultural Demonstrations, Handbook for Agricultural Advisors, Paris, ERA, 1955, p. 73.

[68] Committee on Evaluation, AEA, "Program Evaluation in Adult Education," Washington, D C , 1952, p. 3.

[69] Kelsey, D. D. and C. C. Hearne, Cooperative Extension Work, Ithaca, New York: Comstock Publishing Associates, 1955, p. 219.

success in youth work and the establishment of contacts with key men. If these objectives had been evaluated according to the position they occupy in the structure of objectives, these agents would have had a stronger feeling of accomplishment and a clearer picture of the program execution process.

Evaluation is considered very important for programs of social and technological change outside the reservation in this country and elsewhere. Evaluation of such programs on the reservation should be considered more important for the following two reasons: because the Extension organization on the reservation is not established as it is in the rest of the country, and second because there is evidence of strong disorganization of the personality and social system.

Evaluation of programs on the reservation today is much more difficult than it would have been a number of years ago because of such disorganization. Besides this, little change has occurred in the traditional set of norms of the society. As discussed in the chapter on objectives, the impact of the influence of the western culture was such that it disrupted the equilibrium of the social system on the reservation—primarily in reference to the group which had adopted western values. The rest of the people on the reservation attached themselves to traditional norms in order to retain a group where they could find recognition, security, and affection. If through evaluation the causes of this disorganization had been detected earlier, more emphasis would have been placed on modifying certain norms and preparing the group for the impact. Evaluation in this particular case would have been done more effectively if it had been done with the assistance of experts in the fields of psychology, anthropology, and sociology.

Evaluation sometimes involves comparison with similar situations elsewhere. Disorganization, because of the impact of a complex culture, has been recorded in a number of rural societies elsewhere. In these societies, however, as in the case of the Dakota Indian society, policy makers have not yet had the opportunity to check the effectiveness of specific methods of approach in order to cope with the alarming effects of disorganization due to rapid social changes.

Concerning rural Indonesia, which in comparison to the Dakota Indian society is much less disorganized, Justus Van der Kroef states:[70] "It is not inconceivable, then, that the new national state may be able to prevent the worst evils of disorganization and too rapid social change by strengthening the communal and associational aspects of traditional rural society. But its efforts must be slow and calculated, with a constant eye on the incredible differences in social structure and tradition throughout the vast archipelago."

It is quite obvious that in order for an agent to be able to evaluate the effectiveness of a program on the reservation, he must define the previous situation accurately and, if possible, with the assistance of a specialist, and starting from this situation, define his objectives clearly and imaginatively. Evaluation without an accurate description of the situation and statement of well-defined objectives is not possible. Besides these two conditions, a number of factors which affect evaluation should be considered by the agent. Some of them are analyzed by H. Rheinwald in his chapter on "Evaluation of Rural Extension."[71]

The importance of evaluation as an integral part of all teaching and program planning work is justified by Kelsey and Hearne as follows:[72]

(1) Without appraisal of results we have no sound basis for improving our work.

(2) It helps us to identify needs for concentrated effort.

(3) It gives us assurance and confidence.

(4) It has a value in creating public confidence by giving rational facts.

(5) Once we have a means of judging the value of methods or devices, we may experiment with them and have some degree of certainty that we can choose the best.

(6) It aids our teaching by compelling us to define our objectives clearly.

(7) It shows us whether the tools of teaching can be more wisely chosen.

THE PROCESS OF EVALUATION

Evaluation has been presented as the last step of the program planning process. In an actual situation this is only partially true, because the effort to attain every specific objective and method should be individually evaluated. At the end of a designated period (in the case of a county Extension program over a year) a general evaluation of the active program should take place so that the new situation will be defined and continuity of the program will be secured.

One could ask, "What actually is evaluation? How is it done?" To give a complete answer to this question one should do two things. First, one should cite actual experiences of agents and make a simple comparison by asking for both general and specific objectives; three questions—

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[70] Van der Kroef, Justus M., "Disorganization and Social Change in Rural Indonesia," Rural Sociology, Vol. 19, No. 2, June 1954, p. 73.

[71] Penders, Methods and Program Planning in Rural Extension, H. Veenman & Zonen, Wageningen, (The Netherlands), 1956, p. 306.

[72] Kelsey and Hearne, Op. cit., p. 219.

what it was, what it is, and what it should be. Second, cite elaborate statistical methods requiring the assistance of specialized scientists. Each of these two methods of evaluation are discussed in the following pages.

It is not the purpose of this paper to explain how evaluation is conducted; rather its purpose is to give the agent an understanding of its importance and enumerate and explain the variety of practices that could be used. The agent, according to the situation with which he is confronted, should decide whether to ask for outside help, or to use relevant references concerning the development of a method fitting his particular situation.

First, it is necessary to determine what we actually intend to measure during this process, what things on the reservation should be measured in order to know what has been accomplished and what must still be done. Extension is an educational agency whose purpose is to bring about changes in human behavior. Therefore, the dimension that we should measure is human behavior.

Unfortunately, human behavior is very complicated because a multiplicity of factors, often contradictory, influence human action. An Indian could have rejected the outside community and returned to the reservation for a number of reasons. Perhaps he could not adapt himself to regular working habits; or he found that actually his reference group was the reservation; or he found that his reference group was the outside non-Indian group which did not accept him; or his reason for returning might have been a combination of these factors.

In order to determine more accurately which factors determine certain behavior patterns, the use of specialists trained in methods of social research is necessary. If a specialist is not available, the agent will have to decide. He should decide, for instance, which individual should be encouraged to prepare for outside-the-reservation employment; he should consider as many characteristics, favorable and unfavorable, as possible and compare them with the characteristics of those who had left the reservation and then returned. Age could be an influential factor, as could education, type of training given by the agent, family problems, etc. The multiplicity of factors which are involved in such programs demonstrates that evaluation is not a single act but a continuing process, completed only when the desired goal is achieved.

Extension objectives do not always deal with overt behavior, often they deal with covert behavior. Sometimes they deal with basic knowledge about soils, nutrition, attitudes towards farm or health practices, values, skills, or abilities to solve problems. Change or such behavior can be detected up to a degree by observing overt behavior; after that a more sophisticated method of evaluation should be used in order to measure change. Let us see what some of these methods of evaluation are, but first, let us examine what is the basic research design behind evaluation.

The purpose of evaluation is the objective measurement of change. This change, in both overt and covert behavior, can be expressed in quantitative perimeters. Basically, analysis of change is a matching operation. The same circumscribed group of individuals is studied in two time periods. The difference between period one and period two must outweigh the probability of chance results; conventionally we demand odds greater than one to twenty. In certain cases we even predetermine the amount of change we expect at the end of the designated period. For instance, we say that for this particular period we expect to introduce many farm practices to many people, though usually such forecasting is not possible.

In Extension evaluation, our main interest is to find out how effective our program is, how many people change behavior because of our program. Quite often, however, change is affected by forces alien to our program, and it should be determined whether or not the recorded changes have been initiated by outside influences. In order to establish this, a control group is necessary. A control group is a group similar to the group we are interested to study and which we call observation group. Sometimes such control groups cannot be secured; instead we match each individual in the observation group with an individual out of the group who has similar characteristics. These characteristics should refer to all possible factors which could influence the outcome of the program; for example, education, age, skills, economic potential, etc. In a simplified form, such a design could be expressed as follows:

Period I

Control Group A

Group B (Observed before the application of the program)

Period II

Control Group A

Group B (Observed after the application of the program)

In this case the evaluation process involves the difference between Period I and Period II, and/or between the observation and the control groups. The difference again should outweigh the probability of chance result.

Let us now see what are the most common methods of securing the required data and the most common methods of quantifying the concepts we would like to measure. Again as mentioned previously the purpose of this brief review is not to help the agent learn how to conduct evaluation studies of this nature, but to make him aware of the existence of these methods. [73]

[73] Sellitz, Jahoda Deutsch, and Cook, Research Methods in Social Relations, Henry Holt and Co. Inc., and some information was obtained in Young's book entitled, Scientific Social Surveys and Research, Prentice-Hall, Inc.

The case study. The case study is one method of exploring and analyzing a social unit. That social unit may be a family, an institution, or a community. It is an abstracted phase of experience usually performed in the interest of describing some quality in the experimental whole. Since it can combine the study of a multiplicity of factors and situations simultaneously and also over a period of time, it is most often used in studies of evaluation of technological change in less developed cultures, where usually entire culture units are studied. The advantage of this method in one respect is also a disadvantage in other respects. The main criticisms are: inadequate sampling, too subjective (the investigator sees what he wants to see), and difficulty in transposing data into scientific terms. Its execution involves three principal steps: (1) interview of informants, sometimes with the use of a questionnaire; (2) use of outside sources, such as newspapers, to bring out the total picture; (3) drawing up conclusions—interpretation, analogy, and evaluation of processes and the total situation.

Case studies of relatively long duration which emphasize various aspects of change could be used very effectively in evaluation studies on the reservation. They can make possible the measurement of the effectiveness of the used community development approach as compared to the conventional Extension approach, or, in the case of the Pine Ridge Reservation, measure the influence of the established industry on both the community and the personality of its members.[74] In both cases the use of control groups would increase the validity of the findings.

Statistical studies. The so-called "quantitative research," compared to the case study, is traditionally recognized as the type of research which is at the other end of the methodology continuum. In this type of research specific concepts are quantified and, with the use of various testing devices, their validity, reliability, and unidimensionality are tested. This quantification of qualified data and the conversion of concepts into a well defined single dimension offers the investigator accuracy and the ability to explore specific areas of interest.

It has been stated previously that in certain phases of a program certain objectives become more crucial than others. For instance in the case of an evaluation study concerning the influence of a small industry on the Pine Ridge Reservation, personality integration and level of living could be considered two important factors. Their relationship with background variables could be studied in two time periods—at the beginning of the operation of the small industry and after a predetermined period. Studies of this nature require more thorough investigations and the involvement of both the statistical and the case study, because in such endeavors it should not be a question of case study method versus quantitative research, but rather of case case study and quantitative research.

In certain cases, quantified research is used after the case study has indicated the need for more accurate measurement in specific areas of behavior. In other cases preliminary statistical studies can indicate that case studies are necessary and sometimes case studies of single individuals. For instance, certain individuals, regardless of the fact that they have characteristics of persons who are usually able to adapt themselves to the outside community, return to the reservation. Individual case studies would be advisable for such persons in order to explore additional factors affecting adjustment outside of the reservation.

Use of scales. Today a number of techniques can be used to quantify a concept. First the concept is operationally defined. For instance, we want to quantify the concept "social change." Social change means a number of things and it is necessary to predetermine the various aspects of the concept. Normally we study those aspects of the concept which are in line with the objectives of the study. In evaluation research on the reservation, for example, we could be interested in changes in values, leadership patterns, level of living, etc. Most of these concepts can be quantified with the use of some technique. In some cases, such as in the case of values and level of living, often there are ready-made instruments which can do the work, sometimes with some modification. Some of the concepts which would be used to quantify them are discussed below.

Values As explained previously values are very important parts of the individual's personality and are strong predispositions to action. What we will do, how we will behave in certain stiuations, is determined by our values. It is very important then to know first, with the use of bench-mark studies, what the values of the people on the reservation are, and then, with the use of follow-up studies, trace possible changes in values. Again, as explained previously, values change very little through the years and they do not disappear. However, their rank can change. Change of values in quantified research could be measured either in terms of changes in their intensity—usually in relatively long-time periods; or in terms of changes in their rank order. In most cases we not only try to find out how much the people in the program area have changed in values or in some other way, but also what are the characteristics of the people whose values have changed. In this way it is possible to accumulate additional information about individual sub-groups, and in future endeavors treat them differently.

Values, as most social dimensions, are measured with a battery of questions. In each of these questions the respondent has to choose among alternative aspects of behavior referring to other values we would like to compare

[74] Sasaki, Tom, Fruitland, New Mexico: A Navaho Community in Transition, Ithaca, New York: Cornell University Press, 1961.

them with. Concerning certain values, there are ready-made questionnaires which can be used. This is also the case concerning the so-called projective technique where instead of a battery of questions, pictures are used to record the individual's reaction.

Attitude and opinion scales are usually less difficult to construct than values and scales because they are aspects of behavior which change easier than values, their changes are more easily detected through evaluation studies.

Level of living. There are standard scales such as the Sewell scale which measure the level of living of farmers in various regions of the country.[75] These scales shoulbe be adapted to the Indian culture in order to include cultural items which would differentiate people on the reservation as to their level of living.

Technological change. In studies conducted by Extension personnel or rural sociologists, technological change is usually measured with three different dimensions—adoption of recommended farm practices, basic knowledge of farming, and attitudes toward recommended farm practices. Similar variables are used by anthropologists and persons interested in health and nutrition programs. There are numerous studies on adoption of farm practices and techniques of developing adoption scales discussed in the Journal of Rural Sociology and in various experiment station bulletins.[76] Scales measuring basic knowledge in contrast to those measuring adoption of farm practices and attitudes towards them, usually include right or wrong or multiple-choice questions.

Leadership and visiting patterns. The sociometric technique is most often used to identify leaders and visiting patterns in a community.[77] In using this technqiue the respondents are expected to anwer a number of questions referring to the persons in the community to whom they would go for advice, persons who they think are capable of carrying out projects, persons who can suggest projects, etc. Similar questions are used in relation to their visiting habits. The responses will indicate the person who has been pointed out by the greatest number of people in the community as most popular. Further elaboration of the data can indicate the characteristics of these individuals. The acceptance and effectiveness of new leaders usually can be determined with evaluation studies conducted in two time periods. In a similar fashion visiting patterns can be determined.

General community surveys. Various approaches have been used for general community surveys, varying in depth and sophistication. The more comprehensive ones study the structure and the function of the community system and they test as many variables as possible. Others intending to fulfill more utilitarian purposes deal with a limited number of variables and with those which are most important to the objectives of the study. Dr. W. W. Reeder of Cornell University has developed a relatively short questionnaire which includes among other variables, questions on community facilities, needs, values, beliefs, participation, and leadership patterns.

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[75] Belcher, J. C. and E. F. Sharp, A Short Scale for Measuring Farm Family Living: A Modification of Sewell's Socio-Economic Scale, Oklahoma AES T. B. T-46, Stillwater, 1952.

[76] Rural Sociology, Vol 23, No. 2, 1958.

[77] Reeder, William W., "Questionnaire for Community Surveys," Dept. of Rural Sociology, Ithaca, New York: Cornell University.

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